More Sea Fights of The Great War

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and
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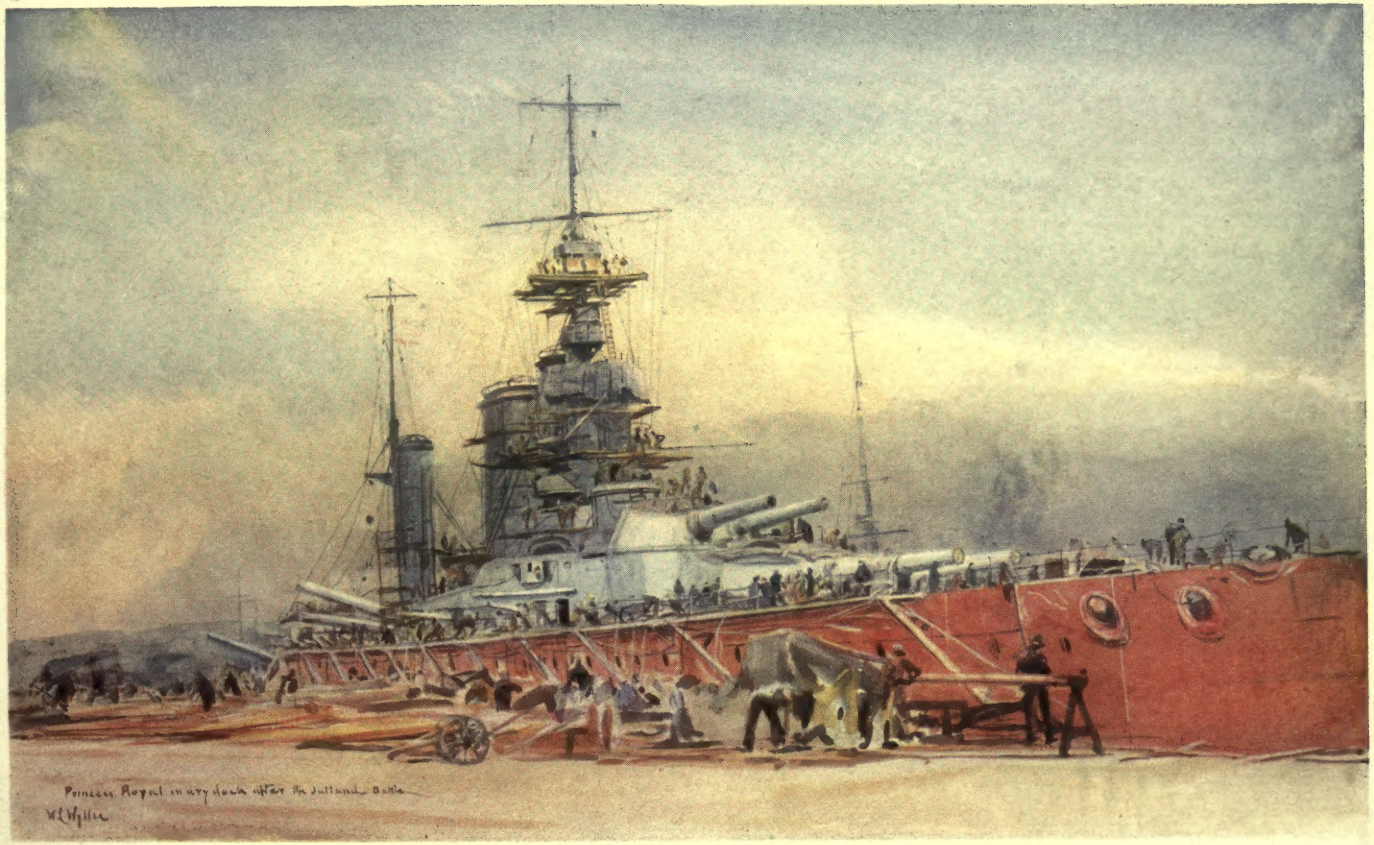

Princess Royal in Dry Dock after the Jutland Battle

MORE SEA FIGHTS OF THE GREAT WAR

Including the Battle of Jutland

BY

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AND

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With 24 Colour and 26 Black-and-White Plates by
W. L. WYLLIE, R.A.

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Dedicated

to the Memory of those

who gave their Lives for King and Country

PREFACE

THIS book, like its forerunner, "Sea Fights of the Great War," is again the work of many hands. Naval friends have contributed vital details, giving life and colour to what might otherwise have proved a dull recital of facts.

Of the three collaborators whose names appear upon the title-page, one of them, Mr. W. D. Kirkpatrick, served in varying capacities all through the war. His work was highly technical, and he has been able to give many accounts of the inner working of the great fighting ships, with glimpses of the daily life of our gallant sailors. The second, Mr. W. L. Wyllie, R.A., cruised in all types of craft of the Royal Navy, from the largest and newest of the super-Dreadnoughts and battle-cruisers to submarines, "Q" ships and motor launches. He has been chiefly concerned with the portrayal of the war at sea. His pictures have been in almost every case painted on the spot from the actual ships, the guns being specially trained and elevated to the correct position. The third, Mr. Charles Owen, has devoted all his attention to sorting out the fragmentary scraps of information, putting them into proper order, and giving a smoothness to the narrative.

We offer our combined efforts to the thoughtful among our fellow-countrymen, in the hope that they may help the men and women of Great Britain to understand how much they owe to the Silent Service, which carried on through four long years of waiting and watching, interspersed with desperate fighting, and finally brought the great German Empire to hopeless ruin.

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More Sea Fights of the Great War

CHAPTER I

THE WORK OF THE GRAND FLEET

EARLY in the year 1914 war clouds were gathering. How threatening they were could only be known to a select few. The technical ratings of the reserve had been asked "upon how many days per month they expected to be more than twenty miles from home?" and, secondly, "in how many hours they could report with full kit at their depot ship in readiness to join the fleet?" These facts must have been known to many, but through the early summer the general public was sceptical as to the possibility of a European war on such a tremendous scale as could be waged by Germany. In May, 1914, there had been a second intimation from the Admiralty to this class of men asking for further particulars, and also for an improvement in the time for mobilisation. It was, however, not until July that the clouds grew dark enough to warn the whole nation how near they were to a catastrophe, and on August 2 came the order to mobilise.

When the Grand Fleet (as it was now named) disappeared from Portland to take up its war stations, all public trace of its movements was lost. There were many rumours of the location of the different squadrons. The north was the universally accepted destination, but where in the North was guesswork. On the early morning of August 7 eighteen boats, forming the First Flotilla of Destroyers, arrived in Cromarty Firth for oiling and provisions after doing North

Sea patrol. They left again the same evening, loudly cheered by crowds of kilted soldiers. Cromarty Firth was henceforth an important northern base, but for months Scapa Flow was really the centre from which radiated our offensive and defensive strategy. Scapa passed through many vicissitudes, but it proved itself ultimately the key to the great area of the North Sea, stretching to the east, south-east, and at times to the north-east. From this moment onwards till victory crowned its efforts sea power exerted its tireless and unconquerable pressure.

Long months passed by, and many stories came to hand about this distant anchorage, practically land-locked among the bleak, wind-swept islands of the north. It was perhaps dim in the memories of readers of northern Scottish legends, of those who knew Scott's "Pirate," but to the vast bulk of people the anchorage was wrapped in mystery. Fogs and low-drifting clouds hung always over it. Only little by little it dawned upon us that the Dreadnoughts and super-Dreadnoughts, with all else pertaining to our sea power, were using it as a base in spite of swirling currents and rugged rocks that lay like threatening sentinels around its entrances. The roaring Pentland Firth, tearing with untamed fury, gave access to this distant but secure harbour at the beginning of the war. While the clouds were dark and sinister in the East, before the actual declaration of hostilities, Scapa Flow, with "the storm for its lover and the mist for its friend," started upon a history that has grown page by page down to the end of the final chapter of the mightiest of all sea conflicts.

On the eve of the declaration of war three German transports were reported to have passed the Great Belt. Rear-Admiral W. C. Pakenham in his flagship *Antrim*, with *Argyle*, *Devonshire*, *Roxburgh*, and the armed cruisers *Cochrane* and *Achilles*, supported by Vice-Admiral Sir David Beatty in *Lion*, with *Princess Royal*, *Queen Mary* and *New Zealand*, cruised to the south of Fair Island Channel.

These manœuvres were to prevent the enemy from escaping into

Iron Duke in Pentland Firth

the Atlantic. The super-Dreadnoughts and the older battleships were to spread out and steam to the eastward as far as the second meridian; the cruisers in their turn had orders to cover the sea in a south and south-westerly direction, so that the German Fleet should not be allowed to interfere with our trade. Cruisers and light cruisers from Rosyth prolonged the line of ships to the westward, and our sea forces thus extended to within twenty miles of the Norwegian coast.

During the night the far-reaching wireless vibrated with the news that war had been declared against Germany. Almost at the same moment a message flashed through from His Majesty King George. It was an expression of confidence in his Navy. From end to end of the distant seas it was received by officers and men as a call from their King upon their devotion and enthusiasm.

On the following day what may be termed the first "sweep" was continued. It must be explained that the word "sweep" is used in the Service to express several different operations. For instance, in a sweep with battleships, cruisers or destroyers the object is to locate any enemy who may be venturesome enough to put to sea. The vessels carrying out the sweep are spread as wide apart as the state of the weather will allow. If there is no mist the battleship divisions may be four miles apart; the light cruisers and destroyers may be beyond the distant horizon; but all keep in constant touch. The reader may realise what a great expanse of open water can be thus searched when the Grand Fleet rushes at high speed, in clear weather, on a mission of discovery.

Another kind of sweep is intended to clear minefields, and is generally carried out by trawlers, though paddle-wheel steamers and destroyers are also used. The vessels work in pairs, each towing a "kite" made of wood, and slung with a span in such a way that the movement of the boat through the sea causes the implement to be forced downwards by the action of the water. When the vessel stops the kite rises to the surface and is easily hoisted in. The

German mines are moored with heavy sinkers and wire long enough to keep them just below water. When mine-sweepers begin work they have a wire shackled between the two kites. The pair steam apart the length of the wire, which, kept down by the kites at each end, is towed sideways through the water, fouling the moorings of any mines which may be in its track. When a mine is released and rises it is easily destroyed by rifle or other fire.

The charts in Lord Jellicoe's book show the North Sea marked with the tracks of the different squadrons, sometimes in parallel lines right across the map, at others in long diagonals, now and then forming squares, oblongs or triangles. These represent manœuvres of the above kind which were carried out in the early part of the war.

During the following days reports, mostly untrue, came in from many sources. Two German cruisers were said to be steaming north near Trondhjem; four torpedo boats were reported off the Shetlands, also steaming north. A German liner, *Kronprinzessin Cecilie*, was stated to have passed east through Stronsay Firth. All these rumours were investigated at once, as well as the story that the enemy was establishing a base on some unknown part of the Scandinavian coast; but there was no confirmation. The Second Cruiser Squadron, under Admiral Gough-Calthorpe, with the light cruisers under Commodore Goodenough, explored the islands fringing the rugged and indented coast of Norway, and then turned to the Shetlands and Orkneys. Vice-Admiral Bradford, with his slow-going Third Battle Squadron (they were known as "the Wobbly Eight"), covered the investigating ships at a distance—moving by a shorter route. Sir David Beatty, whose battle-cruisers had been fuelling, rejoined and covered Rear-Admiral Pakenham, while his ships again made a thorough search of the Norwegian coast. Meantime the Dreadnoughts had gone to Scapa to complete with oil and coal. The anchorage at Scapa at this time was quite unprotected from U-boats or adventurous destroyers.

On the afternoon of the 7th the battleships again steamed out

to the open sea, screened through Pentland Firth by Captain Wintour in *Swift* with his flotilla of hard-worked destroyers. The Dreadnoughts steamed right round the Orkneys, and were back in the North Sea on the 8th, where three of them engaged in target practice, whilst the rest of the fleet was carrying out fire-control exercises off Fair Island. It was here that great hidalgo of Spain, the Duke of Medina Sidonia, was wrecked with his galleon and sought refuge on its inhospitable shores. His sailors warmed themselves at Fair Island fires, leaving to later days the evidence of their visit. Such evidence can be found in the few products the lonely island can put upon a modern market. In the circle of history it was to become once more a central landmark in Britain's power at sea. Even while this very fire-control practice was being carried out off the island a torpedo was fired suddenly at *Monarch* by a German submarine, and a periscope was afterwards seen from *Iron Duke*. This put an abrupt end to the exercise; course was promptly altered in the hope of ramming the hostile intruder, but it submerged, only to be observed again a little later by the look-out of the Dreadnought.

Next morning *Birmingham* was steaming through a glassy sea, light mists hid the horizon. The wireless staff intercepted a call sign in Telefunken, which was repeated several times without response. Evidently an enemy was somewhere not very far away trying to get into communication with a consort. Shortly afterwards a submarine was sighted on the port beam nine hundred yards away. She was awash, and at once started to manœuvre for a position from which a torpedo might be fired at *Birmingham*. A deadly waltz at once began, each antagonist trying to get in the mortal blow. The helm of the British light cruiser was put hard a-starboard at the same moment as the German's was over to port, and the enemies rushed at each other, striking a glancing blow. As the submarine scraped along the starboard broadside of *Birmingham* Captain Duffy, to save his propeller blades, promptly ported his helm, and as the

German drifted astern one of the after-guns was discharged at him, wounding his periscope and sending up a cloud of brown smoke. Round came the light cruiser in another desperate effort to ram. The torpedoes of the submarine did not take effect, and the British ship circled at full speed, striking the Hun fairly amidships. Great volumes of evil-smelling oil belched out as the wreck sunk. "First blood to us," the news rang through the fleet. In spite of this triumph the ships were kept constantly zigzagging, as it was suspected that no solitary German submarine had made the attack. On the 10th the fleet steamed to a position to the westward of the Shetlands, where it was considered there would be less chance of meeting the U-boats. Sir David Beatty proceeded ahead to sweep a wide area, and a screen of the Fourth Flotilla covered his big ships. The "County" cruisers, with Commodore Goodenough's lighter craft, were to search for the German submarine base, which was now suspected to be near Stavanger. The Norwegians assured the Commodore that there was no enemy there. The British officers at first found it hard to believe that the U-boats could make such long trips or stay so many days at sea; but the Germans were soon able to show that their under-water craft had a much wider radius. At this period their menacing power of attack as it developed later was not fully realised.

In the meantime Admiral Jellicoe, wishing to consult with the Admiralty direct, proceeded once more to Scapa Flow where he could talk freely about the defences of that base. He had asked for two old battleships which he might moor in the entrances to the Flow as a slight protection against the ubiquitous U-boat. *Hannibal* and *Magnificent* arrived shortly after, and Rear-Admiral Miller, who came with them, was soon hard at work devising defences. The local territorials, with the inhabitants on the spot, were to patrol the coasts, telephones were to be put up, and gradually a scheme developed as experience dictated. During these early days of war all sorts of wild reports spread among the fleet, as they did through-

out England. Airships and aeroplanes were seen everywhere, hinting of the part they were destined to play in future hostilities.

On the 10th Admiral Jellicoe rejoined the Battle Fleet to the north-westward of the Orkneys, as far away as expedient from the hunting-ground of the U-boats. All the ships were exercised at forming line-of-battle and in sub-calibre firing. Sir David's battle-cruisers were sent in to fill up their bunkers. The cruisers, which had finished their minute examination of the Norwegian islands, also returned to the base for the same purpose. *Drake*, flagship of Rear-Admiral W. L. Grant, joined up, and was at once dispatched to search for possible submarine bases in the numerous little channels of the Faroe Islands, which lie far away to the north. In the meantime Rear-Admiral Dudley de Chair was getting to work with his old first-class cruisers, patrolling between Norway and the Shetlands—dreary and monotonous work, but growing in importance from day to day.

The first week of the war had now passed without any event of great interest on either side. One U-boat had been sunk and several hundred merchant ships had been boarded. The German High Sea Fleet was safe in harbour, guarded by mine-fields and land defences.

In the meantime a serious attack might be expected, as fourteen German battleships were said to be anchored off Cuxhaven with several mine-layers and thirty destroyers. A big mine-field was reported off the mouth of the Jahde to our ships still exercising at battle tactics and gunnery in the open sea. On the 12th the Battle Fleet returned to Scapa, and Admiral Beatty cruised to the westward, Rear-Admiral Gough-Calthorpe, meanwhile, steaming 100 miles to the south-east of Kinnaird Head, and then back to Cromarty.

Loch Ewe was now tried as an alternative base to Scapa, Rear-Admiral Purefoy being put in charge of it. Rear-Admiral E. R. Pears was appointed to Cromarty Firth, where defensive measures were taken in hand. At this time all our bases were open to submarine attack, and had the German U-boat commanders possessed

more knowledge they might have gone in and played havoc among our Battle Fleet. The enemy, it appears, had no idea that we were so unprepared. There is a story that a captain of a captured U-boat was asked why he did not venture into Scapa, and he answered that he "was looking for the defences." There were none at that time. Knowing how well-protected were their own ports, the German High Command could not believe this possible. To their war-trained psychology such carelessness seemed a sheer gamble.

Three pre-Dreadnoughts, *Russell*, *Albemarle* and *Exmouth*, had joined the Grand Fleet, which was still too weak for a decisive battle with the whole German fleet. These old ships were slow, their 12-inch guns were short and could not throw shell with the tremendous force of modern artillery, but there yet remained many uses to which out-of-date ships could be put. As pawns in a game of chess are moved forward and sacrificed for the sake of some combination which shall ultimately win the game, so these storm-battered ships were shoved ahead of the more precious Dreadnoughts to take risks and danger. For a similar reason, less justifiable from a moral point of view, a large part of their crews consisted of reservists or merchant service men. *They* did not grumble, but made a jest of the danger. Their unit was called "the Mine-Bumping Squadron," and the men "the Uriahites," because they were always put in the forefront of the battle. So by the irony of circumstances the R.N.R. and the R.N.V.R. bore the brunt of much of the rough-and-tumble service of the war, and henceforward they deserve a special place in our naval history.

On the 14th, at midnight, the whole of the ships passed through Fair Island Channel (commonly marked as "The Hole") to carry out yet another sweep in the North Sea. Six mine-sweepers were to go ahead, and though the fleet was thus protected against possible mine-fields, its slow speed made it an easy mark for the torpedoes of the hidden U-boats. At noon on the 15th *Iron Duke*, with the whole of the Battle Fleet, was about half-way between Scapa and the

Shetlands, steering to the east. A combined sweep of the southern part of the North Sea had been ordered. The torpedo flotillas from Harwich, together with two submarines, then stationed off the mouths of the Ems and Jahde, took part. The weather was beautifully clear, and at 10.55 the fleet was in Lat. 55.45 N., Long. 5.26 E. The only enemy which appeared was a submarine, sighted by *New Zealand*. The cruisers went south and found nothing. Then the whole fleet turned to the northward, screened by the cruisers at wide intervals. Admiral Gough-Calthorpe steamed towards Lister in Norway, along the fringe of islands, and afterwards turned towards Scotland, Sir David Beatty meanwhile supporting him. The "County" cruisers extended farther west, and Vice-Admiral Bradford followed in their wake with his "King Edwards."

During these manœuvres the destroyers, helped by the minesweepers, were kept during daylight as a submarine screen for the battleships. When night fell they dropped astern, and next morning took up their old stations, zigzagging as before, steering towards the swirling currents of the Fair Island Channel and the comparative safety of the North Atlantic; there they faced the known forces of Nature, and not the unknown devilries of man.

At this time the whole of the North Sea was divided up into seven areas. This was done so as to make wireless signals shorter, and to prevent confusion. It was clear that continuous steaming had begun to tell on both crews and ships—human and material machinery alike being unable to bear the strain, the great super-Dreadnought *Orion* now developing serious defects in her condenser tubes. All suitable "spares" were collected from the different ships and sent to Loch Ewe, where it was decided to overhaul her. A thousand R.N.R. firemen, sent from the south, were distributed amongst the ships. Seaplanes and aeroplanes went to Scapa, and the first armed merchant ship, *Alsatian*, joined the Tenth Cruiser Squadron. The day of the converted liner was rapidly approaching.

Already she was much more useful for the boarding work than the out-of-date "Edgars," and by degrees these operations were carried out only by this class of vessel. Nor was this all; her development provides the romance of the war, a romance which will tinge the pages of history for many generations.

On the 18th all the Dreadnoughts and super-Dreadnoughts went into Loch Ewe, which for a short time became a busy and important port. A supply of coal and oil had accumulated there, and the repair ship *Assistance* was connected to the shore system by cable. On the way round the captain had called the crew together to tell them that there was little to fear from the German submarines, that Loch Ewe was considered to be outside their radius of action, and that the position of all enemy boats was known excepting one, whose activities were not apprehended so far north. His confidence was not justified, for the U-boats soon gave evidence of their ubiquity. During the night *Assistance* challenged a collier, which refused to reply satisfactorily. The stranger was chased for a few miles; a shot fired across her bows immediately brought her to, and as she was able to give a proper account of herself she was allowed to go on her way.

For remoteness and secrecy the position of Loch Ewe seemed to be ideal. The country on the land side is full of memories of Jacobite plotting and conflict. The loch is sheltered from the sea by the island of Ewe. High mountains rise all round its shores, dotted by very few houses; the water is deep over the whole area, forming a fine anchorage. The strenuous work of coaling and taking in ammunition proceeded for two days. The attached cruisers were anchored in suitable positions for defending the entrance against U-boats, and the armed launches of the fleet kept a watch at night. It was supposed that no stealthy foe could pass the outer guard unchallenged.

Two days later, in the gathering dusk, the super-Dreadnoughts got under way, and *Assistance* alone was left in the deserted harbour.

Next day the repair ship put to sea to assist a steamer stranded in Applecross Bay. A fleet collier had lost her way among the Western Islands, but as she had found a suitable beach to rest on the work of salvage proved neither long nor difficult. In two days she was patched up sufficiently to be floated, and then *Assistance* joined the Grand Fleet at Scapa Flow. In spite of the ceaseless monotony of life in the fleet there was no demoralisation; the same sweeps were carried out with like results, the weather was stormy and treacherous, and the practice of the Battle Fleet was often interfered with by fog. At night the entire fleet passed through the same old Fair Island Channel, with its swirling currents and misty surroundings, to carry out next day the same old manœuvres which, from target practice to battle formations, invariably ended in increased efficiency.

Apart from its effect upon the characters of men, twenty days of war, though there had been no fighting, began to develop all sorts of defects, large and small, in the fleet itself. *Ajax* burnt out a boiler; *King Edward VII.* and *Dominion* reported cracks in the tubes of two of their 12-inch guns; and *Rifleman* and *Comet* collided in a fog. Mist hung gloomily over operations, and patrolling had to go on in spite of everything. One thousand additional seamen joined the fleet and were distributed, as the stokers had been, among the different ships. The constant manning of the guns with all the tension of instant preparation, was a great strain on the crews—on their bodies, their minds, and the highly-trained nerves that equipped them with their fine efficiency.

At this moment the present narrative overlaps with the first volume. Vice-Admiral Sir David Beatty had been sent away to take part in the operations in the Heligoland Bight. Only light cruisers were asked for by the Admiralty, but Sir John Jellicoe, foreseeing the forces that might be involved, wisely sent the big battle-cruisers. This foresight rendered the engagement that ensued a complete success. The action is discussed and reconstructed in detail in the

first volume. It was carried out from start to finish with the pluck and dash proverbial in the great Service.

Commodore Tyrwhitt in *Arethusa*, with the flotillas from Harwich, fell in with four German light cruisers. A very hot action ensued. Other ships came to the support of the hard-pressed little force, and finally Admiral Beatty's battle-cruisers dashed out of the mist and wiped out what remained of the enemy. *Mainz*, *Köln* and *Ariadne*, with a four-funnelled cruiser, *Strassburg* or *Yorck*, were sunk, and one other badly damaged; 700 Germans were killed, and 300 taken prisoners. Coming so soon after the outbreak of war, this splendid little battle heartened everyone, for it proved that the old fighting spirit of the British sailor was as strong as ever.

On August 29 Sir David and Commodore Goodenough returned with their victorious battle and light cruisers. Both proceeded to Scapa to complete with fuel, whilst *Liverpool* dropped out in order to carry the German prisoners to Rosyth.

After the crushing defeat of the German cruisers in the Bight many sweeps were carried out—most of them unproductive. The army in France called urgently for small-arm ammunition. The ships sent 50 per cent. of .303, and later on a great number of rifles and machine-guns. Every momentous incident on land and sea proves how little the country—the beating heart of a world-wide Empire—was prepared for a great war on a continental scale.

On September 1 a scare occurred which caused considerable commotion throughout the fleet. The weather was misty and dull, with rain at intervals—just such weather as Scott and other writers describe as prevalent in these northern and desolate regions. All the super-Dreadnoughts, with the Sixth Cruiser Squadron and Commodore Goodenough's little fleet, were quietly taking in stores, coal, oil and ammunition, off Scapa Pier. Some of the ships which were fitted with torpedo nets had them out, but nothing unusual

was toward. Suddenly *Falmouth*, which lay anchored to the westward of Holm Sound, opened fire at what she thought to be the periscope of a submarine. Then *Vanguard*, one of the outer line of battleships, let fly in unison, over *Collingwood*. A patrolling destroyer joined in. Commotion and the deafening thunder of guns reverberated through the mist and rain. All the destroyer flotillas got steam up as rapidly as possible, slipped their moorings (there was no time to weigh), and rushed to the various entrances of the Flow. The Dreadnoughts cast off store-ships and colliers, shortening in their cables at the same time. Light guns were manned, drifters, motor-boats, yachts and picket-boats went tearing up and down to confuse the enemy, or ram her, if possible. Then the colliers were once more ordered to go alongside the battleships, to protect them against torpedoes. The searchlights flashed out, and smoke poured from the great funnels everywhere. To complicate matters further, thick weather set in, and at that time no facilities for navigation at night existed. The fleet was ordered to weigh by divisions, and it is much to the credit of the officers that the whole of the ships got safely to sea in spite of smoke screens and searchlights, commotion and uncertainty. This incident illuminates with vivid colour the absolute inadequacy of protection from lurking enemies. The anxiety was bravely borne by those in command on whom responsibility rested.

Assistance got out last, and on the way to Loch Ewe challenged a large steamer which tried to escape. When a shot was fired across her bows she flashed into light, proving to be a hospital ship. *Assistance* also went in chase of a motor-boat sighted by one of the battleships. It was late in the afternoon before she was overtaken, and as flag signals were absolutely disregarded, a three-pounder shot was sent bounding across the sea; the motor-boat still tried to escape, but, being only capable of comparatively slow speed, was easily overhauled. She turned out to be a private yacht. Her white ensign was confiscated, and the scared owner informed that he would be

well advised to get a permit before venturing so far to sea in war time. It took long to teach the public how much of liberty had to be sacrificed for the cause of national safety.

The monotonous sweeps continued from September 1 to 6, the Battle Fleet having little to show for so much hard work. There could be no doubt that mines were being laid in large numbers off the east coast by ships flying neutral or even British colours. Many vessels were sunk, including the gunboat *Speedy*. The great number of traders in these waters made the boarding of even a few of them very laborious. Lighthouses, which helped the enemy to fix his position when laying his mines, were ordered "out," and gradually all except the most important were darkened.

Loch Ewe, buried amid western islands, became the main fleet base. It was thought to be safe from the German submarines. England had not as yet a single harbour where her ships could undergo in security the necessary repairs. On the other hand, Loch Ewe's remoteness from civilisation, and the consequent facility with which the fleet could be concealed from the enemy, made it valuable. Up along the mountain-side strange lights were always flickering in a way which suggested dots and dashes; the same thing had happened time and again in populous seaside towns. Armed parties were sent ashore from various ships to endeavour to solve the mystery. It was at last thought that the flashing was due to the swinging lanterns used by the farmers visiting their cattle- and sheep-pens. Hostile aircraft, too, were always being reported, so all the ships not provided with anti-aircraft guns (and, surprising as it may seem now, very few at that time possessed such weapons) were soon armed with all sorts of boat or field guns on high-angle mountings. Many and varied were the designs, but, as it happened, none was required in this wild and secluded spot where rumour found an environment suited to its many inaccuracies.

There was, however, a great surprise in store. The Battle Fleet had steamed away, leaving only a few colliers and one lame

duck, when, just as daylight was breaking on the morning of October 7 the conning tower of a submarine broke water close to a group of colliers and store-ships. The hatch of the conning tower opened, and a figure in a white sweater appeared—a calm and self-possessed observer of the secluded anchorage. There was no hurry; the man took a good look round, and, being unable to see any warships, coolly climbed down and, apparently satisfied, closed the hatch. The conning tower sank again below the water. One of the repair ships at once opened fire at the track left by the bold patroller of the depths, and the battleship *Illustrious*, which was acting as guardship at the entrance, also blazed away, but the submarine escaped safely away to sea. Depth charges were to come later, but for a moment what a picture the episode presents of unexpected danger and the evolution of a new and successful weapon!

The Commander-in-Chief ordered all those who were conversant with the circumstances to appear on board *Iron Duke* as soon as possible, where they were, no doubt, closely cross-examined. In the meantime all ships had to evacuate the harbour. As a fleet base Loch Ewe's history was finished; for a brief time it had flourished, surrounded by a girdle of mountains, protected by island barriers near and distant. At the touch of an invisible foe it reverted once more to lasting obscurity and undisturbed seclusion.

One final episode lends lightness to the hurried departure of the ships. A party of seamen, with other ratings, had been allowed on shore at Altben. There were no facilities for having a convivial gathering in the only hotel, owing to its having been taken over for Admiralty purposes. A council of war was held, and a four-gallon jar of whisky purchased. The party adjourned to the side of a small stream close handy, and soon succumbed to the refreshing influence of "mountain dew." The afternoon wore away, and the time for returning to the ship drew nigh. Return aboard was imperative. The question was what to do with the rest of the

precious spirit. Some of the party were already rather unsteady and incapable of strategy. Obviously there was too much nectar to finish that day, even given the courage and the heart of Athos, who never became indisposed. It was therefore unanimously decided to bury the jar, in order that it might be available when the next shore leave was granted. It is a melancholy reflection, but, if undiscovered, there the jar still lies, like some buried treasure of older pirate days. The fleet returned to Scapa.

Agincourt, a new battleship, built at Elswick for the Turks, and taken over by the British Admiralty at the outbreak of war, being now completely equipped, joined the Grand Fleet. She was very sharp and long, was armed with fourteen 12-inch guns, manned with a fine crew, and proved a very useful ship. An American officer who saw her later said: "Sir! I guess she's got some punch!"

Vice-Admiral the Hon. Sir Stanley Colville was also at this time appointed to general command of the islands of Orkney and Shetland. These isolated outposts of Britain had played their parts in the making of history for many centuries. The Commander-in-Chief of the Grand Fleet found quite enough on his hands without having to organise the defences of such widespread islands, and Rear-Admiral Miller had already full employment in administration at the base in Scapa Flow.

Yet another great sweep of the North Sea had to be carried out by the combined forces from Scapa Flow, Cromarty and Harwich. The tracks of the different squadrons on the chart look like some enormous lop-sided gridiron, with its handle where the red cliffs of Heligoland stand out of the green waters of the Bight, its upper crossbar stretching from Pentland Firth almost to the rock-studded Norwegian coast. The torpedo flotillas from Harwich, supported by Commodore Goodenough with his light craft, were in their turn supported by Sir David Beatty and his battle-cruisers. The Seventh Cruiser Squadron worked to the westward. Sir John Jellicoe, with

Battle Cruisers zigzagging in the North Sea

all his Battle Fleet and the cruisers commanded by Rear-Admirals Gough-Calthorpe and W. C. Pakenham, steamed towards Heligoland. Unfortunately the weather became very unfavourable for such work. A dead-calm haze hung over the water, which reflected the sun like a burnished mirror, making it hard to say whether the shadowy half-seen ships were friends or foes. It was impossible for the Commander-in-Chief to see what was going on in van or rear. The super-Dreadnoughts were kept moving, with the screen of cruisers, to the south until midday, when it became clear that the net so carefully spread had caught nothing. Only one seaplane was sighted by the Seventh Cruiser Squadron. The Fourth Flotilla, which ought to have joined the Battle Fleet in the morning, was unable, owing to fog, to come in touch before the afternoon. Great numbers of trawlers engaged in fishing were overhauled, nearly all of them showing neutral colours. Strong Telefunken waves were noticed whenever the fleet had passed them, a coincidence that caused a good deal of suspicion in regard to these seemingly peaceful fishermen. Boarding all of them meant very hard work for the boats and much loss of time. In spite of careful examination not a trace of wireless apparatus was discovered, and, as there were no enemy ships to engage, another return sweep to the north-west was organised.

The newly-joined sister battle-cruisers *Invincible* and *Inflexible* received instructions to sweep towards Dundee, Rear-Admiral Pakenham towards Aberdeen, Commodore Goodenough's light cruisers sweeping slowly towards Pentland Firth. The armoured cruisers of Rear-Admiral Gough-Calthorpe, on the Commodore's right, made their way towards Fair Island. All these ships spread as far apart as the clearness of the weather permitted. Sir David Beatty's battle-cruisers supported the movement, and the Dreadnoughts, in divisions, spread four miles apart, extended the operation eastward. These columns, like the prongs of an enormous rake, gathered up whatever came in their way. Merchant ships and fishing

boats were closely examined, but no enemy was either sunk or captured. Again the sweep caught nothing.

At three in the morning of the 11th the entire force was ordered to turn north-eastward, and Gough-Calthorpe's cruisers were stationed between fifty and a hundred and fifty miles from the coast. This great sweep, involving such an expenditure of coal and oil and planned with so much forethought, can hardly be said to have been as unproductive as appeared. The experience gained by all officers in handling their craft under such trying conditions of haze and mist, and the difficulty of distinguishing between friend and foe, caused new devices to be introduced for mutual recognition.

At this time a new patrol along the 3rd Meridian, between the Dogger Bank and the North Falls, was established. The destroyer flotillas from Harwich carried out this duty, supported by two old cruisers of the "Bacchante" class. The "Broad Fourteens," off the Dutch coast, had also to be watched to catch the German mine-layers, now very active in many directions.

Minor troubles now developed. *Hibernia* reported a crack in one of her 12-inch guns; the salvage operations on the armed cruiser *Oceanic*, which had gone ashore on Foula Island, had to be abandoned. On the other hand, the great floating dock, which had been towed round the west coast from Portsmouth, was now safely moored off Invergordon. This was a very smart bit of work, but unfortunately another tow, one of the old central battery "Invincibles," her hawse pipes being open, had swamped off Portland with considerable loss of life. She was on her way round as a house-boat for workmen.

Whilst the Commander-in-Chief still lay in Loch Ewe with his super-Dreadnought Battle Fleet the impulsive First Lord arrived to discuss a proposal for the bombardment and capture of Heligoland. He brought with him the Chief of the War Staff, the Director of Intelligence Division and the commodores of submarines and torpedo craft.

"Red are the rocks, green is the grass, white is the strand,
These are the colours of Heligoland"

It was the kind of operation that took a strong hold of Winston Churchill's imagination. He is a Hotspur in temperament, but such a venture as that proposed meant the risking of a portion of our fleet, at the moment irreplaceable. The newest ships would not, of course, have been risked on any desperate project or forlorn hope; but the older battleships, afterwards sent to the Dardanelles with such unfortunate results, would have borne the brunt and reaped the glory, if any glory had come from the hazardous enterprise. It must be borne in mind that the guns of these old ships could not be elevated for long range. They would have had to steam in well under the high-angle fire of the forts. German range-finders proved their efficiency later; their high-angle guns were effectively hidden. The project was hazardous in the extreme, and even had we taken Heligoland the public would have been staggered by the losses involved. Face to face with the problem of holding it, we should have been no farther forward in the supreme task of destroying the sea forces of our enemy. The arguments against the operation were overwhelming, all the Flag Officers with the exception of one being opposed to it. The First Lord remained unconvinced, but when the scheme was discussed at the Admiralty later on Sir Cecil Burney also expressed himself as dead against the whole idea.

Here is a drawing taken from high up in the southern sky which may perhaps give an idea of the appearance of this formidable little island.

Many batteries are artfully concealed among the sandstone pinnacles and green fields. Nordhavn is the north-westerly point of the line of crumbling cliffs. Near it are many 12-inch guns and great howitzers. The Zeppelin sheds are on the high land, and to the east the little town of Waldhavn, with its landing-pier and marine mole. An old lighthouse stands to the south, and adjacent is the supposed site of the fire-control tower for the whole island.

From the little landing-place of Südhavn two great jetties stretch to the south-east, enclosing the inner and outer harbours.

Another notion discussed at the same conference was an expedition to the Baltic. It is hard to see how this operation could have been successfully carried out. The Grand Fleet would have been weakened, while the German Fleet, with the Kiel Canal as a waterway, might have struck east or west as the occasion served. The proposal was never carried out, though adopted later by Lord Fisher.

We continued to build ships and light craft and train men. Our sea power was growing, and it was much more important to strengthen our fleet than to fritter away our ascendancy in wild and dangerous projects.

Scapa Flow, a winter gale

CHAPTER II

SUBMARINE ALARMS AT SCAPA

THE conference at Loch Ewe had been critical. The Minister at the head of the Admiralty had seen to that, but the impression he had left on the Commander-in-Chief only added to the calm, moral courage for which Lord Jellicoe will become famous in as yet unwritten history.

The immediate action of the fleet on the First Lord's departure was another gigantic sweep. These sweeps become monotonous in this narrative, as they became monotonous to those sea-worn heroes who in the first months of the war by their vigilance and patience held the shores of Britain secure against all attacks. Once again the Battle Fleet sailed round the Orkneys, as before, and turned to the inevitable south. Sir David Beatty brought his big ships out of Scapa, with Gough-Calthorpe's armoured cruisers and Commodore Goodenough's four light cruisers of the "Town" class. They were bent on a more thorough examination of all neutral trawlers in the Bight of Heligoland suspected of acting as "look-out" vessels for the enemy's benefit. Unfortunately the weather was very rough. Even the landsman, in the seclusion of his fireside, can fancy the turbulency of the short steep seas that broke on the much-tried fighting ships. The programme of the fleet had to be changed, the destroyers being sent back.

Still, the battle-cruisers, facing all weathers, examined the trawlers near the Little Fisher Bank till the tempest made boarding impossible. During their activity the Tenth Cruiser Squadron, consisting of large armoured merchant ships such as *Teutonic*, *Mantua*

and *Alsatian*, were sweeping down the rock-bound coast of Norway. Wireless signals were cut off so that the ever-listening enemy should hear no whisper that the British fleet was at sea. At this moment of tireless activity the great Dreadnoughts covered a front of forty miles, a front prolonged from eastward to westward by the searching cruisers.

Suddenly a lying report was spread that two light craft, convoyed by destroyers and submarines, were steaming north, hugging the Danish coast. On receipt of this message the whole fleet turned south at midnight on the 21st, and by daybreak they had manœuvred so as to cover a front of more than a hundred miles. The air was clear as crystal, but no enemy hove in sight, and on the following day the Dreadnoughts, having retraced their course, steamed once more to the westward of the Orkneys.

The whole narrative must read as a record free from adventure, dull and monotonous, but crammed full of endurance. The sinking of the cruisers *Cressy*, *Aboukir* and *Hogue* happened at this time, a disaster which might have been expected, filled with tragedy because of the noble lives that were lost. It is fully described in our first volume, and needs no recapitulation.

Up in the north, however, there was neither rest nor safety allowed to the Grand Fleet. On September 27 a gale of great fury burst upon it whilst steaming to the eastward of the Shetlands. Wireless masts were carried away, and many boats were engulfed in the gigantic billows. Battleships of the "Iron Duke" class took aboard much water, for their 6-inch guns were mounted low. The mighty storm raged through the whole of the following day; veering to the north at last, it moderated on the 29th. When the seas had gone down the Dreadnoughts were safely escorted into Scapa by the destroyers which came out of shelter after being ordered to take refuge from the fury of the gale.

Beatty's battle-cruisers, off the Naze of Norway, did not escape this storm. They were hunting, with *Drake*, *Nottingham* and *Fal-*

mouth, together with two destroyers, for *Prinz Friedrich Wilhelm*, and ran into the full force of the gale. The submarines E 1 and E 5 had been reconnoitring in the Skagerrak and Cattegat, and all the small craft had a rough and perilous experience. The elements fought against us.

All the time the German submarines were growing more and more active, and every possible precaution had to be taken whenever the fleet was at Scapa. The anchorage was a nightmare. Two torpedoes were fired at *Stag* in the vicinity and one at *Cheerful*. Such incidents provided obvious warnings.

At the beginning of October all the super-Dreadnoughts were at their stations, with the exception of *Ajax* and *Audacious*, both of which had sailed south to refit. Vice-Admiral Bradford's fleet of "King Edwards" was constantly at sea supporting the cruisers with the Sixth Battle Squadron of still older ships.

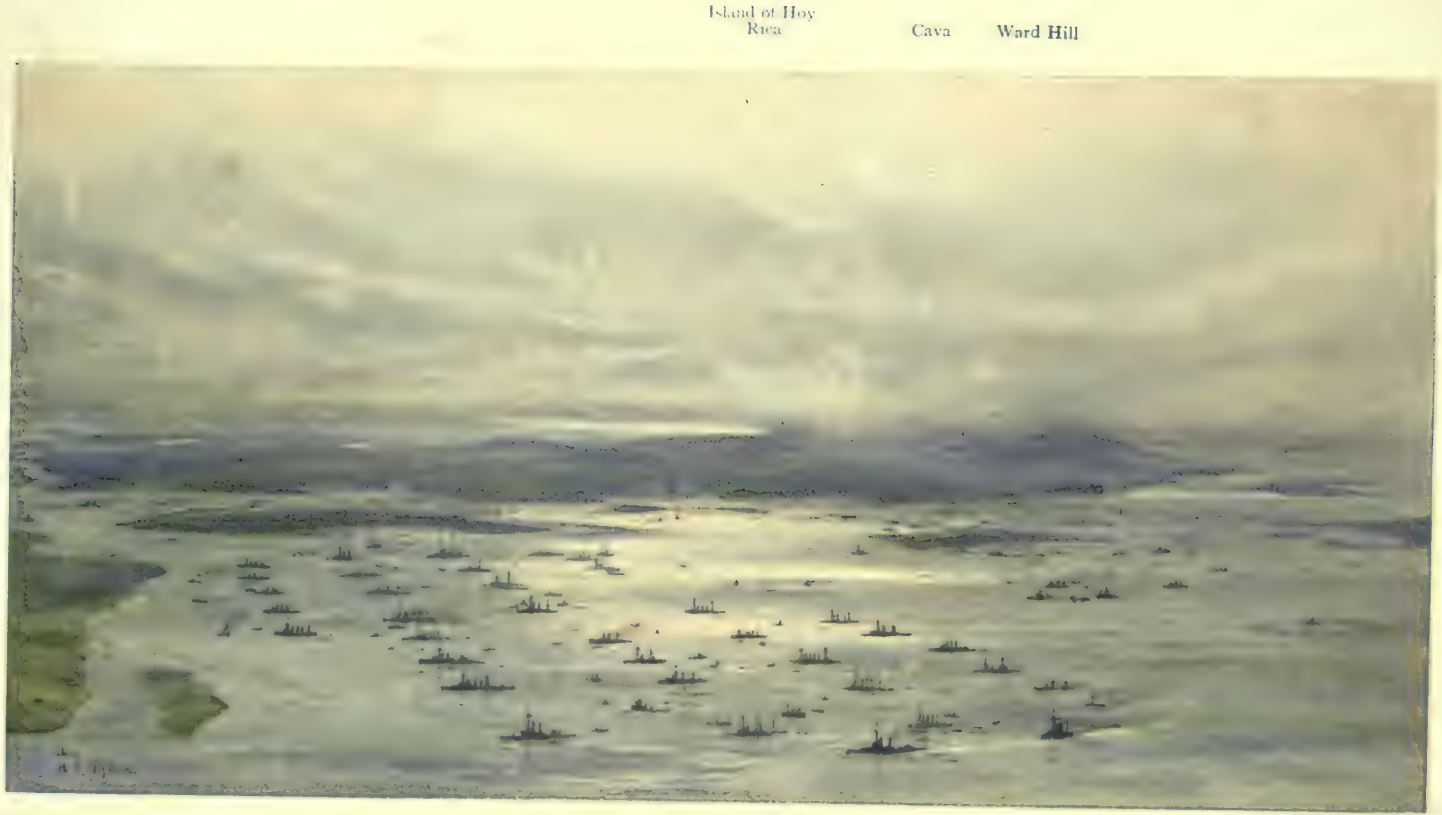
A great convoy of transports, full of Canadian troops, was at this moment crossing from Halifax, escorted by *Majestic* and *Princess Royal*. The Grand Fleet guarded this convoy from prearranged positions, ever watchful lest an enemy should break out of the North Sea during the fateful week of crossing. Beatty, with the battle-cruisers, watched ceaselessly the turbulent waters west of Orkney and Shetland; mine-sweepers patrolled Fair Island Channel; the Second Battle-Cruiser Squadron patrolled east of the Shetlands; the great Dreadnought Battle Fleet, accompanied by light cruiser squadrons, with other divisions, widely spread, steamed to the south; destroyers guarded the Pentland Firth and the coast of Norway; so that the whole North Sea, famous in a thousand years of history, was held fast in the grip of our sea power. We carried out our duties unchallenged, except that the flagship *Antrim* was attacked by a submarine. Two torpedoes were fired at her, both missing.

At this early stage of the war British officers hardly yet believed that U-boats could make such long journeys unattended. Yet another fruitless search was made for a base among the desolate ice-

worn islands east of the Udsire Light. A second ship, the old *Theseus*, was the next attacked. She was one of the Tenth Cruiser Squadron, and as it became clear that the submarine could easily reach the patrol area, the units were ordered to withdraw farther north. Before this could be carried out another old ship, *Hawke*, was reported missing. The message was ominous. *Swift*, leading her destroyers, rushed to where the cruiser had last been spoken, and sighted a raft with twenty-one survivors. Before a rescue could be made, *Swift* herself was attacked by one or more U-boats, evidently watching for their prey. Nevertheless the men in jeopardy were taken on board, in spite of great risk, the big destroyer, screened by her flotilla, being only able to manœuvre among the wreckage at high speed. Speed is essential as a defence against submarines.

Evidence of the under-water menace was piling up, because on the same day two other destroyers, *Alarm* and *Nymph*, were attacked eastward of Scapa. *Nymph*, seizing her opportunity, rammed the Hun marauder and sent her to the bottom, with only slight damage to one of her own propeller blades. On the same afternoon yet another submarine put in an appearance, being sighted from the shore batteries off Switha. This last incident created a tremendous commotion, followed by an immediate rush of destroyers, picket-boats, trawlers, drifters and tugs. Store-ships and colliers cuddled alongside the Dreadnoughts. Torpedo nets were spread and guns manned, steam was raised for full speed, and at last the whole fleet weighed and made for the open sea. Whatever happened, it would not be caught in a trap, and the anchorage was no place of safety.

Certainly a sense of insecurity does not lead to calm judgment or calculated action. During the hurly-burly one destroyer fired a torpedo at what she suspected was a submarine—only a rock suffered from the tremendous explosion which followed; another shot was fired at a spar drifting end up; oil was reported to be welling up at a certain spot, but a diver who was sent down could only find a rusty oil drum with a hole in it. These proceedings told their own story.



The Grand Fleet in Scapa Flow

Scapa Flow was neither more desirable nor safer than Loch Ewe. The Commander-in-Chief, with responsibility upon him such as no other shoulders had ever borne, turned his attention farther afield. All men know the Island of Mull, grey and austere, with its heather-touched hills, its deep valleys, and sea inlets. It stands sentinel-like, the home of many legends and romances, on the western coast of Scotland. It need not be insisted upon that it is a place of beauty. To see it in the distance from Oban is enough to make one realise that. Loch-na-Keal, one of its most beautiful inlets, was, with Lough Swilly in Ireland, chosen as a refuge for the unprotected fleet. The narrow entrances of both the new bases were obstructed, while all colliers and store-ships took shelter which, it was hoped, would at last prove adequate.

At the same time the blockading ships were moved still farther to the north behind the Shetlands. It was expected that the U-boats would not reach them there.

It must not be supposed that our sea forces were ever stationary. A report was received that some German cruisers, destroyers and submarines had left Dantzig for the North Sea. Sir David Beatty and Commodore Goodenough were ordered with their squadrons to the Skagerrak. They had to face very heavy weather, so that again the attending destroyers had to be sent back. In spite of these difficulties, they swept right up to the Skaw and along the coast of Norway. As usual, the enemy remained out of reach in his harbours. So the long, tedious patrols were carried on as before, the outer blockade line now being in the waters west of the Hebrides.

Nothing particularly eventful happened in the vicinity of Loch-na-Keal. Buried amidst high mountains, with its entrance from the Atlantic screened by islands, it is practically as still and secluded as an inland lake. As soon as the fleet was established there steps were taken to obstruct the narrow entrance with steel wire hawsers, with an improvised gate in the centre of the channel. As an extra precaution a constant patrol was kept up by armed picket-boats. The

Germans were evidently keenly alive to our movements, or rumour dogged our actions with persistent perversity. Less than a week after the arrival of the ships in Loch-na-Keal reports came in that submarines were in the vicinity. Once more uneasiness and uncertainty were added to all the other responsibilities that weighed so heavily on those who were in control.

To allay some of the suspense, *Assistance* put out to sea on October 25 as a bait or decoy to the invisible enemy. She was ordered to carry the red ensign, like an ordinary merchantman, and was escorted only a few miles by destroyers. Nothing happened to her at enemy hands. By the irony of fate, however, she narrowly escaped being blown up by some of the new harbour defences when she reached Lough Swilly, and was only warned in the nick of time by a destroyer on duty. Greatly reassured by her safe passage, the rest of the fleet put out to sea next day for tactical exercises, and the Second Battle Squadron was ordered to carry out firing practice on the two battle targets which had been brought round from Lamlash. So the grey, heather-covered hills of Mull, far from the great struggle of mighty nations, saw the giant ships depart, one of which was never to be seen again in the secluded harbour it had left.

The rendezvous for this section of the fleet was off the coast of Donegal. A fresh south-west wind was blowing, and a great swell rolled in from the vast wastes of the Atlantic. Just as the squadron was getting ready for practice, *Audacious*, one of the newest and most powerful units of the fleet, in turning into position, struck a German mine. A dull, menacing thud was heard, and the water came pouring into the port engine-room. It was reality at last, and at once the other ships of the squadron were ordered to scatter. No drifting menace was suspected. A torpedo from a submarine was the most likely, the most quickly apprehended, missile of destruction. This great catastrophe, which became public property throughout the Empire, was censored during the war, though

freely talked of in clubs and more or less public places. America knew of it, and published accounts. To the average Englishman it was merely an incident or a disastrous blow, according to how his temperament was tuned to the events of a decisive war.

Shortly after the explosion the water reached the centre engine-room. The stricken ship was at once headed for Lough Swilly and signalled for all the help available. Tugs, trawlers and the armed boarding steamer *Cambria*, escorting colliers carrying great wire hawsers, hurried to the rescue. The hospital ship *Soudan* was also ordered out, and the light cruiser *Liverpool* stood by. Then the White Star liner *Olympic*, homeward bound from New York, hove in sight. She had picked up the wireless S.O.S. signals, and steamed at full speed to do her part. The leviathan of peace was called upon for aid by her great war consort, and her share in the attempted task of salvage will prove in history the romance of England's might upon the sea. First, fourteen boats on her starboard side were swung out; stewards from all directions took up their allotted places; men went about their duties quietly and orderly, as if at a boat muster on a Sunday. The boats slipped down into the heavy sea—there was never a hitch—all started rowing immediately towards the sinking ship. Man struggled against the forces of Nature with unconquerable courage and determination. Our national character rose to a high pitch of moral fortitude. The following is taken from a description of the scene by an American, one of *Olympic's* passengers:

"Still we were mystified, until a lady came to me with tears running down her face, and said:

"'Isn't it awful?'

"'Isn't what awful?' said I.

"'Why, don't you know? The battleship has struck a mine, and is sinking.'

"Those stewards had a mighty rough rowing, but they soon reached the ship about three-quarters of a mile away, I should think, and one after

another went alongside. The bluejackets had leaped four to six feet into the boats very methodically. . . .

"The *Audacious* was wallowing in the heavy swell, listing to port, and badly down by the stern. All along her upturned side the sailors stood still as though fallen-in for divisions. Two black cones were at her starboard yardarm, and at the port a chequered flag over a white pennant with a red dot in it. We learned afterwards that the captain had called for 100 volunteers to stand by the ship, and as all volunteered he selected the number. As I have said, the sea was very rough. Three of the *Olympic's* boats became entangled in the netting of the battleship well below the surface and were upset, and all the men were thrown out. We saw the bottoms of the boats, the men righting the boats, clambering in, and taking a load of sailormen. Not an oar was lost. In an hour and a half about 800 men had been taken off, 180 brought to the *Olympic*, and the rest distributed among the war vessels. At 12.30 only the 100 were left on board, standing in line and not moving. As each of our boats reached the *Olympic* it was cast adrift, there being no time to hoist in boats. Every man was wanted to handle a heavy hawser, for it was hoped the battleship could be towed into shallow water and saved. Wet to the skin as they were, the boats' crews joined in the hawser work.

"The destroyer *Fury* did splendidly, dragging the heavy wire hawser between the liner and *Audacious*. The handling of the *Olympic* was something to see and remember. The hawser gradually, almost imperceptibly, grew taut, and very gently our ship's engines began the pulling. But the battleship's steam was all gone, her engine-room under water, and she could not help herself, lying a dead weight in the water. Before she could be moved the hawser snapped. Immediately all of our crew, the 170 rescued men on board and volunteers from the 3rd class, 1,000 men in all, were dragging the great anchor chain from forecastle to stern. They got it there and were ready to pay out when a signal from the battleship said, 'Cease work; another bulkhead has gone; we are taking water fast—no hope of saving her.' By this time it was perhaps 4 o'clock, and our ship immediately received orders to proceed to Lough Swilly, six miles away. We didn't get started until about 6, and went very slowly. At 7 the 100 men were all taken off and put on board the *Liverpool*, which was standing by, 160 yards away. At about 7.30 or 7.45 the magazine of the battleship apparently blew up. One piece of plate struck and instantly killed a gunner. That was the only casualty of the whole day, and no others of the men were more than scratched. It was a great sight.

Saving the Crew of *Audacious*

We were all very proud of our stewards and pantry men. Reid waited upon us at breakfast; at 1 we went to lunch, and he was on hand looking as usual. At 7 we went to dinner, and towards the finish I said:

"'Well, Reid, we have had an exciting day. Were you able to see all that was going on?'

"'Oh, yes, sir,' he said. 'I went out in charge of the captain's four-oared wooden boat. We took off twenty and put them on board the *Liverpool*, then took off twenty more and brought them to this ship.'

"Said I, 'Reid, at what time did you get back to the ship?'

"'At 12.30, sir,' he answered. Yet even he was serving as though nothing had happened, and never hinted at what he had been doing. Day, who has always been Reid's assistant when we have had two tables—a nice-looking young fellow, whom you will all remember—went out in one of the lifeboats which was upset. He got entangled in the netting, and the battleship's men caught him by the hair and collar, dragged him on board, where he remained with the 100 until they were taken off just before the explosion. He was on board the *Liverpool* all night, and was sent to the *Olympic* the next morning.

"'What were you doing the last two or three hours on the wreck?' I asked him.

"'Cooking ham,' he said. 'You see, sir, they hadn't eaten anything since early morning, so we rigged up a little stove in the forecastle and I cooked ham for them.'

"'You saw the explosion?' I asked.

"'Oh, yes, sir, I was only six or eight feet away from the gunner who was killed. I helped to get him ready for the burial.'

"So, Day had been steward, able-bodied seaman, cook and undertaker all in one day and he was as quiet, modest and smiling as though it was only an ordinary experience.

"'What are you going to do,' I asked, 'when the *Olympic* is laid up for the winter?'

"'Oh,' he replied, 'those fellows on the battleship are going to a fine new ship, and they want me to join them, and I've promised to do it. I think I'll like it, and we've all got to lend a hand somewhere.'

"Several hundred of the *Olympic's* crew intend to enlist, it is said. Early next morning, Wednesday, the skipper of the *Olympic*, Haddock, was taking his bath when the captain of the lost battleship came on board with effusive thanks and compliments. Later in the morning the Admiral came and I was introduced to him.

"'I have come on board,' he said, 'to congratulate your commander on the magnificent way he handled his ship yesterday, and to thank him for the great service he rendered us.'

"I asked Captain Haddock why he didn't blush, but he only grinned. Then I descanted upon the grit and the cool behaviour of our crew, and told the Admiral of special cases which I had observed, not omitting Reid and Day. He looked bored, but I had him where he could not escape until I had finished. Then he quietly remarked, 'Well, of course, they're English,' with a look which clearly said, 'How the devil else could they have behaved?'"

Let us return to our own information of the sinking of *Audacious*, then one of our most magnificent ships. There came a time when she took a final list and turned completely over; there was a terrific explosion—the flames shot upward to the heavens. As the waves engulfed the glistening hull the detonations could still be heard, tearing the vitals of the mighty battleship asunder, with a kind of dull reverberation.

Many suggestions have been put forward to account for that great explosion. The most probable is that, as the ship listed over, the fused shells dropped from their racks in the magazine and detonated, or perhaps the oil fuel tanks gave way and fed the furnaces. Such an explanation would cause an explosion which would inevitably spread to the magazine and complete the destruction of the ship. When she capsized the cruiser *Liverpool* was only about five hundred yards away, and many fragments of torn steel fell upon the decks. It was then that the petty officer was killed by a piece of plate, a part of the double bottom.

The stern suppression of the news of this disaster by the Censor tells its own tale of how serious the loss was. It diminished our margin of superiority—it proved that even the latest class of super-Dreadnought could be easily sunk. The discovery caused great consternation, and important structural alterations were at once undertaken in the hope of preventing similar disasters to other ships.

Apart from the loss of *Audacious* the Grand Fleet at this moment

A Sweep in the North Sea

was not in overwhelming strength. *Ajax* and *Iron Duke* developed leaky condenser tubes; *Orion* lay at Greenock having her turbine supports repaired; *Conqueror* and *New Zealand* were both in dock. The rival fleets had become nearly equal. To challenge the seventeen British Dreadnoughts and five battle-cruisers Germany could send to sea fifteen battleships and four battle-cruisers. She had more than double the number of destroyers—eighty-eight to forty-two. We had been beaten at Coronel, and some of our units were ordered to distant waters to make good our losses.

Among the latter the twin cruisers *Invincible* and *Inflexible* were sent south to search the far Atlantic for Admiral von Spee's squadron. Soon after their departure *Tiger*, a very fine and handsome battle-cruiser, joined the Grand Fleet. Just as the numbers were nearly up to the old strength *Princess Royal* was ordered to join the North American Squadron.

From Scapa the ships still sailed the sullen waters of the North Sea, in calm sometimes, mostly in fogs or gales of wind. Breakdowns were reported frequently, and lame ducks came wobbling home. The patrols kept ceaselessly at their duties, the destroyers splashing through the inclement seas, always on watch and guard. The Battle Fleet in columns left ever their tracks of foam as they furrowed the angry waters in squares, oblongs and triangles. Day after day they went through the same dreary experience, out and home; the same reports of the enemy, hidden and elusive behind the fortresses carefully thought out in peace time. The season of long winter nights slowly gathered over the fleet, stinging spray and biting frost, with all too brief hours of daylight—and mostly the daylight of northern waters, where the sun runs his course so near the horizon that the yellow tints of misty twilight dominate the day —and pitchy nights flecked with watery stars that drape with mystery the long and perilous darkness that obscures the Skerries.

It was on November 24, the greater part of the fleet being out at sea, that those who remained received an alarm of submarines

off the entrance to Hoxa Gate. All available forces, picket-boats, drifters and trawlers got under way and rushed to sea. It is said that mine-sweeping trawler No. 96 left most of her crew behind and that her engine was working badly. In spite of so great a disadvantage she had luck on her side, for she rammed one of the U-boats. The enemy dived and still further damaged herself against the bottom. Later on U 18 came to the surface near Muckle Skerry under the eyes of the searching fleet. She had the white flag flying. The patrol boats rushed down upon her and her crew was taken off by a destroyer.

The fate that followed this captured foe has a certain measure of magnificence in accordance with the pretended conception of Germany's attempt to gain the mastery of the seas. While she was being towed towards Scapa Flow she appeared to be floating very low, and a few minutes afterwards she sank in deep water. It was stated later by the German crew that one of their number had stayed behind, slipping away unnoticed, and had opened the sea cocks and given up his life to save the boat being taken into port where she would have been overhauled and all her hidden secrets discovered. His action, if the statement be true, was worthy of high tradition, a gleam of true bravery among many deeds of shame and wanton cruelty. As for the submarine's presence at Hoxa, her commander seemed very surprised that no fleet was to be seen in the Flow. It is believed that the line of buoys at the entrance led him to think that a net was spread for him. As a matter of fact no obstruction was there at the time.

Several other unsuccessful attacks were attempted during the next few weeks, but at last, when the nets were spread, it seemed that the comparative safety of the Grand Fleet had been secured. The constant anxiety was at an end and the position of Scapa Flow proved a commanding one. From there the German Fleet could be contained in the North Sea and all possibility of escape into the Western Ocean prevented.

Submarine Alarms at Scapa

In spite of a new sense of security our fleet had little rest during that long winter. From first to last through December, 1914, continuous gales blew over Scapa Flow, rendering special precautions necessary for the safety of the fleet. On Sunday, December 27, a very strong south-west wind had persisted all day. The Dreadnought Battle Squadrons were out engaged on technical exercises and were returning to the Flow, steaming without lights on a heavy following sea, the smoke from the funnels blowing ahead and obscuring the distance. Near Hoxa Gate *Monarch's* navigators saw close under her bows a patrol trawler. The helm was put over and the engines stopped, and *Conqueror*, next astern, unable to clear, struck *Monarch* a glancing blow with her starboard bow.

It was evident serious damage had been done to *Conqueror*, for she was badly down by the head. All watertight doors were immediately closed, and when daylight broke she was ordered into shallow water. Divers reported that in addition to the damage above water, extending 150 feet on a level with the main deck, there was a similar rent below the water line.

The work of strengthening bulkheads and constructing strong timber framing to cover the damage had to be done with the utmost dispatch. Even so it was over a fortnight before the ship could be pumped out sufficiently to permit her to attempt the trip to the Clyde or Mersey for permanent repairs. On January 15 she left Scapa, escorted by a number of destroyers, but encountered such heavy weather that she was compelled to return for some further stiffening work. Two more attempts were made to render her sufficiently seaworthy, but on each occasion ill-luck dogged her, and it was not until the end of the month that she finally got away.

The damage to *Monarch* was not so serious. It was confined to the stern frame and did not render the ship unseaworthy or impair her fighting efficiency for very long.

The total loss of *Audacious* was serious enough, and now another

of the best fighting units was out of action for a considerable time. This accident reduced the Second Battle Squadron to six super-Dreadnoughts; they numbered eight at the outbreak of war, and all of them were powerful ships and armed with 13.5 guns.

All this will show how work had to be organised to enable the ships to carry on at all costs, and how the resources of the fleet repair ships were heavily taxed. *Assistance* and *Cyclops* had been fitted out for the purpose before the war began, but the immense volume of work which had to be undertaken at Scapa necessitated complete reconstruction in the repair ships themselves.

While the difficulties of keeping the fleet in a constant state of readiness for sea were partly solved a very marked activity on the part of the enemy began to be reported. In order that the fleet should be in a position to deal with any emergency which might arise a system was organised for all the various ships. Certain ships were at twenty-four hours' notice; that is to say, no work could be undertaken on them which might prevent their being made ready to go to sea in that time. Other ships were at twelve hours' notice. others at six, while a few had steam up and were able to weigh at once in case of distress signals or reports of the presence of the ubiquitous U-boats.

Whenever the news of enemy activity was received the notices could be at once reduced to shorter hours. So all ships were ready, and when the necessary order came on January 24, 1915, the whole of the Grand Fleet was put at one hour's notice, and left for sea during the ensuing night.

Twice before enemy activity had been reported. East Coast towns had been attacked, and the German ships, after doing as much damage as they could to non-combatant men, women and children, had made for home at full speed. Owing to extraordinary luck they had thus far succeeded in evading the British squadrons.

The last German attack on East Coast towns happened to coincide with a combined sweep which had been arranged for the

Scapa Battle Fleet, the Rosyth battle-cruisers, and the Harwich force of light cruisers and destroyers. The action which ensued has already been described and illustrated in "Sea Fights of the Great War."

The light cruisers were the first to engage, then, as the morning mists cleared away, the battle-cruisers sighted each other, the Germans at once making off at their utmost speed for the shelter of their mine-fields. The long chase from the Dogger Bank to the Bight of Heligoland ended in the sinking of *Blücher* with terrible loss of life and serious damage to *Derfflinger* and *Seydlitz*. After turning northward to avoid a submarine, the Flagship *Lion* received an unlucky shell which put her out of action.

Admiral Beatty walked the upper bridge throughout the four and a half hours the action lasted, with shells and splinters falling all about him. He maintained that the conning tower did not afford a sufficient view, and he wished to see for himself as far as possible the effect of his fire. *Lion* expended about fifty rounds per gun from the six 13.5's which could be brought to bear on the enemy.

It was remarkable that no one was killed and only one man seriously wounded. The ship was taken in tow by *Indomitable* and brought slowly back to the Forth. Sixty destroyers rushed up and down to protect the wounded *Lion* from submarine attack. Owing to her thin armour and the steep angle at which the enemy's shells fell the injuries were very serious, and it was only good luck which enabled her to reach port.

The casualties in *Tiger* were more numerous. She received a direct hit on the after control, where a number of officers and men were killed or badly injured. There were also some casualties among the guns' crews of the secondary armament.

When *Lion* at last arrived off Rosyth the repair ship *Assistance* was sent in haste from Scapa Flow, and with all available salvage vessels was berthed alongside. There were many gaping holes through the battle-cruiser's funnels, her teak decks had been torn

by flying splinters, her wireless aerial was shot away, and a projectile had grazed the foretopmast.

Down below the havoc was much more extensive, and it seemed little short of miraculous that the ship was successfully brought into port. Her armour belting had been pierced in many places on the port side, and some of the shells exploded after penetration, wrecking everything in the vicinity.

In the forward flat two torpedoes, which had been lying ready with war-heads on, were destroyed completely, though the air vessels had not blown up. The bakery was wrecked a moment after it had been cleared of loaves. It was the injury to the port feed tank and engine-room which had put the ship out of action. The wing bulkhead, forming one side of the tank, was bulged about eight inches by the force of the explosion inside. The engine-room telegraph and all the pressure gauges were flung across the compartment. All the copper pipes were broken and corrugated con certina fashion. Rivets had started or sprung out, and the holes had been plugged with broom handles and chunks of wood.

Lion still had a heavy list to port, and it was necessary to improvise repairs on the spot. When the port bunker had been cleared of coal, all possible starboard compartments were flooded, and at last the ship was righted and finally listed over to starboard. Even then the damage was far below the water-line.

Two coffer dams to fit the ship's side were therefore constructed, and when they were fixed and the water pumped out it was possible to see the extent of the injuries. The hole into the feed tank was deep enough for a man to stand in. Not only was the heavy armour pierced, but several of the adjacent plates had been displaced, broken and cracked.

No attempt at straightening was possible, so that it was decided to insert timber struts and plug the holes; then the coffer dams were removed, after which the ship steamed away to Newcastle at twenty knots. A wonderful nine days' work.

Bringing in the Wounded *Lion*

Submarine Alarms at Scapa

During the action there were some remarkable escapes. A stoker, stationed below with a fire hose, was standing with his feet apart when an 11-inch shell passed between them. It had come through six inches of armour and two bulkheads before reaching the spot where the lucky man stood. It struck some iron plating and then lay spent upon the deck. The stoker at once turned on the hose. The shell was almost red hot, and steam was evolved in such clouds that the man dropped the nozzle and bolted.

No one on our side believed that sea battles would ever be fought at the tremendous ranges which have proved quite possible. Our armoured decks were not built thick enough to burst big shells. The German designer cleverly looked ahead. Besides building stronger decks and subdividing his ships with many bulkheads, he constructed gun-mountings which allowed of much more elevation than ours. In the Falkland Islands battle the little popguns of *Nürnberg*, on high-angle mountings, had outranged the 6-inch guns of *Kent*.

Owing to the extreme range at which the action was fought most of the damage was done by plunging fire. For example, the shells which pierced the funnels on the port side afterwards struck the edge of the deck on the starboard side before splashing into the sea. The actual paths followed by some of the projectiles were interesting. One 11-inch shell which pierced the armour belting by the after superstructure tore off large pieces from the inside of the armour plate where it came through—great fifty-six-pound chunks flattened like slate by the force of the blow—and the teak backing was torn in shreds. After striking the headstock of a lathe a shell was deflected upwards, again piercing the armoured deck, but this time from below. The impetus which had driven the shell through so much metal was now spent, and when the final plate had been pierced the projectile lay harmless against a watertight door. It is now a treasured trophy, always kept bright—a souvenir made in Germany.

It is curious that the lessons of the battle off the Dogger Bank were not taken to heart by the British Admiralty. Lord Fisher still

continued to push the building of fast unprotected freak-ships armed with yet heavier guns.

Only after dreadful losses in the Jutland battle did we begin to protect the vitals of our ships with armour thick enough to burst the German shells. In one battle-cruiser extra plates were hastily bolted outside the teak deck. Sea power can only be real when the fighting ships are not flimsy structures, but are built strong enough to take their place in the line of battle.

At this stage of the naval war we had learnt valuable lessons, notably that much of the gear of our battle-cruisers would not bear the test of active operations. Considerable alterations had to be made in the electric apparatus of all capital ships. One important improvement consisted in the provision for the distribution of power by alternative sources, other than the ring mains running round the ships. These mains had been arranged where they were considered fully protected from danger, but in action *Lion's* circuits had been actually severed in several places. It became necessary to manufacture large change-over switches, to be fitted so as to supply the circuits which are essential to fight the ship from each dynamo, even though the ring mains were out of action. So urgently were these switches needed that it was decided to manufacture them in the repair ships.

Ships' stores were ransacked for material; iron bars, copper lightning conductors, and brass sheets having been collected, in less than a fortnight the special switches were being turned out at the rate of two a day. Soon all the principal ships were fitted with this addition to their efficiency.

Other important improvements were made in the director and fire-controlling gear. Most of this work was done at Scapa while the ships were in full commission and often at short notice to proceed to sea. Such activity entailed the employment of large numbers of men, who were berthed on one of the old battleships, specially fitted up for them. The arrangement led to at least one amusing incident.

Revenge and *Lion*

Suddenly orders arrived to put to sea at once. In the hurry of departure the ship obeyed her orders so quickly that she was unable to send all her workmen to their floating home. One bluejacket, overhearing the violent protestations of the men forcibly detained against their will, is said to have observed that " They were, perhaps, some of the blokes who wanted to know what the Navy was doing, and he hoped they would jolly well see before they got back."

He is supposed to have got his wish, because the ship took part in the Dogger Bank action.

CHAPTER III

THE UNRESTRICTED U-BOAT CAMPAIGN

IN February, 1915, Germany launched her answer to our blockade. She began, regardless of international law, to attack all merchantmen, neutral or otherwise, in what she chose to call her blockade of Great Britain. Up to that date her submarines had been used to harass our warships. The action in a war of nations was justified by precedent, and, as has been related, was not without success. Our fleet had been driven from base to base, *Aboukir*, *Hogue*, *Cressy* and *Hawke* had fallen victims; *Hermes* had been sunk in the Channel. These were blows delivered according to the usages of war. To meet the U-boats' continual threat to the Grand Fleet special defence against their attacks had been organised. Our excellent system of destroyer screens protected the Grand Fleet practically against all efforts to reduce it in detail. That was the key to German desperation—a national desperation that lay behind the action of the German naval policy and inspired it to break the laws of God and man.

The German Admiralty gave their ominous warning on February 21, 1915, declaring an under-water blockade of the British Isles. The warning, if carried out according to rule regarding the control of contraband, might perhaps have been brought into line with past sea laws. The method in which it was used and its sheer brutality will condemn it for ever—a blot upon the German flag at sea, indelible and shameful beyond all that was ever dreamt of in war. The merchant ships engaged in trading, it must be borne in mind, were at this fateful moment of the great sea's history unarmed

and unprepared. Murder and piracy had been wiped from all the oceans as unspeakable crimes, by the action of nations combined in mutual bonds of civilisation for the suppression of lawlessness. "Blackbeard," Captain Swan and other gentlemen of fortune had been relegated to the pages of romance. Their last echoes can be found in the tales of Robert Louis Stevenson or the fantasies of J. M. Barrie. Yet Germany commenced a campaign to destroy the commerce of the world—a campaign more calculated, more dastardly and more brutal than any drink-besotted buccaneer had dared to contemplate.

The German officer sailed under orders to gain upon the sea the aims of Germany by destruction and terror only. Every ship that showed her nose in British waters was to be sunk at sight, no matter what flag she flew; the crews even were to be fired on as they took to the boats—no time was to be allowed them to provision with food or water. Bad weather or the distance of the nearest land weighed nothing in view of Germany's will to dominate the world by land and sea. Every conceivable suffering was to be inflicted on neutral or foe who dared to sail the deep. We shall never forget those boats which reached safety with half their occupants dead of thirst, hunger or cold. The German name had to be respected, feared—to such a nation's psychology fear is the basis of power. The execration of the whole world was a doom they never counted on. Britain would starve before they thought of such a thing—that was their calculation and it proved their downfall.

Perhaps the total disregard of their declaration and their acts was at first a disappointment to them. The officers and men of the mercantile marine simply carried on as usual.

The most glowing tribute that can be paid to a great service is the true statement that never during the strain of the Great War did a British ship fail to put to sea for the want of a British crew. How scornfully England regarded Germany's policy is proved by the repair ship *Assistance* being ordered to proceed to sea

during the night of February 22 without guard or escort of any kind.

From the German point of view the threat against all rules of warfare by the indiscriminate use of the submarine was not sufficient. They laid mine-fields wherever they thought they could sink ships. East, west, south and north these agents of destruction and death became a haunting danger. At this stage there were few vessels capable of systematic mine-sweeping. As rapidly as possible the unforeseen danger—unforeseen because of its wanton disregard of honourable precedent—was remedied. At first it could only be dealt with by fitting out a number of destroyers with mine-sweeping gear, but such a measure proved inadequate to cope with so wide-spread a difficulty. Besides, our destroyers were badly needed for other work.

Faced by this dilemma, a number of trawlers were requisitioned by the Admiralty. The call for such dangerous service was not in vain. Fitted with kites and other mine-sweeping gear, the trawlers proved themselves literally the scourers of the deep, facing danger and hardship, supremely regardless of all selfish interest, in the service of their country.

Once organised, this trawler section became known as the Auxiliary Patrol Fleet, and though it was first intended for mine-sweeping only, it ultimately took its full part in extensive patrol and other fleet work. The value of the service rendered to the nation by these boats and by the gallant men who manned them can never be sufficiently acknowledged or repaid. Without them the Navy could not have carried on; part of its duties must have been left undone. The trawlers came into service in the nick of time when there was a shortage of destroyers and small craft. Nor did any special service prove the end of their duty or their usefulness. Very soon the trawlers were sent on active operations against submarines in order to release the destroyers for their own work.

The U-boat, once let loose as a universal enemy upon the sea,

The Brutal Hun

soon showed its absolute lack of scruple in its attacks. Even fishing fleets were counted fair prey. No useful purpose—no decision could be reached by making war upon such harmless craft. Such actions on the part of Britain's enemies called to Heaven for vengeance. Several of our old "C" class of submarines were taken north and, after some slight alterations, were towed by trawlers, working to all appearance in conjunction with the fleet. In addition to the tow-line there was a telephone cable by which the trawler was able to tell the submarine all that was happening upon the surface. When the German U-boat came up to open fire the British submarine manœuvred for position and got the enemy with a torpedo. Much valuable and secret work was accomplished by this partnership of emergency in northern waters.

Once when the trawler patrol went out searching for a submarine reported off the Banffshire coast it was lucky enough to locate U 12. It drove her to the surface, where *Ariel* cleverly rammed her. Out of a crew of twenty-eight only ten were rescued. Still, in spite of every expedient used against them, the German under-water craft were very active during the first March that followed on their declaration of a piratical offensive. A great many merchant ships and one armed auxiliary, *Bayano*, were sunk with heavy loss of life. It was a month of mist, with fog and snow, making the stormy waters of the North Sea more perilous than usual.

To pass from this digression to the doings of the Battle Fleet we find that patient and undismayed force on February 18 zigzagging towards its base after one of the countless sweeps. Suddenly Vice-Admiral Sir Cecil Burney signalled that a periscope had been sighted from *Marlborough* and that a torpedo had just missed *Neptune*. All the ships simultaneously turned twelve points to starboard, increasing speed in order to escape the threatening attack. Twelve minutes later Vice-Admiral Sir Doveton Sturdee's division was seen crossing astern of the rest of the fleet. Signals were made to the Admiral warning him of imminent danger, but before he could take pre-

cautions a periscope was sighted from *Dreadnought*. It bore on the port bow. Captain Alderson, putting on all possible speed, steered straight for the hidden submarine. The ram of the battleship went home, pressed down the pirate's stern, and as her forepart rose from the blow the number U 29 was plainly discernible upon her conning-tower. She was Otto von Weddigen's own craft. She had sunk the three cruisers *Hogue*, *Aboukir* and *Cressy* only four months before this, her final action against our fleet.

Oil bubbles, wreckage, even scraps of clothing, rose to the surface, but all the crew, with their commander, had gone to the bottom. It was blow for blow under the fair conditions of war, but the method of her sinking was kept secret for a long time. Germany, branded already with dishonour, seized her opportunity. Every accusation possible was hurled at England—the submarine and her famous commander were martyrs to the treacherous tactics of English seamen. The truth is that von Weddigen fell a victim to his own mistaken judgment. He fired his torpedo at the First Battle Squadron, grew confused at the number of ships zigzagging in the vicinity, and in trying to escape failed to notice the Nemesis that so swiftly overtook him.

The April of this year did not belie its name for storms, and the Tenth Cruiser Squadron had to face many strenuous days. The usual sweeps were carried out by the Battle Fleet—first to the southern part of the North Sea, up and east towards the Little Fisher Bank and home to Scapa or to Cromarty Firth. Often during these sweeps submarines were sighted, but our ships were always steaming fast under the protection of their destroyer screens and so escaped attack. Whenever the fleet was near the trawler fishing ground German wireless messages were intercepted and carrier pigeons seen. No wireless gear was ever found when these vessels were boarded, but it was evident that neutrals were spying for the enemy.

During the same April *Warspite*, a powerful new battleship of the "Queen Elizabeth" class, joined the Grand Fleet, while *Lion*

A Monitor in the Mediterranean

returned from the shipyard at Newcastle, repaired and ready for another fight. Four new armed merchantmen also went to the Tenth Cruiser Squadron, which was doing great work in the blockade of Germany. On the enemy's part a great mine-field was laid in the southern area of the North Sea. As it was discovered in time by our watchfulness little damage was done. Many U-boats were reported seeking with malevolent activity for their prey, so that our destroyers were kept constantly at the highest pressure.

Here we reach the moment when the two greatest nations of the world at sea were engaged in the death grips of a mutual blockade. Not the close blockade of a hundred years ago, such as Nelson or Collingwood carried out against France with supreme success; the old ideas had been modified in accordance with modern naval development. England's main naval base was situated away from the enemy's coast; the constant danger of aircraft had to be guarded against; only distance could give security. Scapa's position, far from the mouths of the German rivers, was at first its protection against surface torpedo boats and, in a lesser degree, against submarines. It was also the only key to the door that opened wide into the North Sea.

England closed the door, in spite of its gigantic size, by a regular patrol of armed boarding-vessels. It kept a ceaseless watch on the North Sea approaches. The patrol consisted chiefly of cross-Channel packets and Isle of Man excursion steamers, and they proved their usefulness. They were always strongly backed up by the larger armed auxiliaries of the Tenth Cruiser Squadron, working between Scotland, the Faroe Islands and Iceland. With the coming of longer days and warmer nights the patrol of the Tenth Cruiser Squadron extended farther and farther north—when the giant ice-fields between Greenland and Jan Mayen Island were shrinking towards the Pole we extended our patrols nearer and nearer the Arctic regions.

It was only natural that an encircled enemy like Germany should

put forward every effort to smuggle men and goods through the steel ring that bound her in isolation from distant neutrals or—such may have been her mad hope—from distant friends. There are stories of candles with copper wicks, or cargoes of grain in bulk concealing more valuable merchandise—such merchandise did not appear in the ships' manifests. Able-bodied men were found hidden under cunning devices. One lady, for instance, supposed to be travelling alone, possessed an exceedingly large cabin trunk. Her voracious appetite for meals, which she insisted should be served in her cabin, was insatiable. She refused all advice to moderate her demands. Suspicion, "struck full of eyes," caused the removal of her trunk. Her husband was inside!

Again there was one passenger with faultless credentials. Some subtle mystery enveloped him, and in spite of his papers he was taken ashore. It was explained to him that if he was being put to inconvenience it was done in the national interest. When questioned he maintained that he had never done any military service and that he was a native of a neutral Power. He had a lunch provided for him and was set at liberty to continue his journey. A boat was ready to convey him back to his ship. Suddenly the examining officer, an expert linguist, jerked out the command "Dismiss!" in German. The effect was electrical—the man's heels clicked together, his hand came to the salute—in Germany "even the most emancipated is not without a master." He left, not in the boat provided, but under escort for Edinburgh and—internment.

Meantime, during the months of March and April, 1915, the U-boats had extended their operations, committing act after act of unheard-of piracy. They were approaching the culmination of their atrocities and, without knowing it, a climax in the policy which ultimately brought America into the war. They committed a deed so execrable, so unheard of, that it set the world ablaze with indignation.

Lusitania was one of the two giant Cunarders built in 1906 under special agreement with the British Government. This agreement

stated that the two vessels must be capable of maintaining a minimum ocean speed of twenty-four to twenty-five knots in moderate weather. Built by Messrs. Brown & Co., of Clydebank, *Lusitania* was 785 feet long with a beam of 88 feet and a maximum draught of 87 feet. Her gross tonnage was 40,000 tons and she was driven by turbine engines of 68,000 h.p. working four propellers. On many of her runs across the Atlantic she logged over six hundred miles in twenty-four hours. Her first cost was estimated at £1,250,000, and the expenses of the round voyage to New York and back, with maintenance and stores, ran into £30,000.

She was to sail from New York on May 1, 1915. Prominent people had booked their passage—a floating hotel, replete with comfort, capable of high speed, she was naturally one of the most famous passenger liners of the age. Such a vessel was almost neutral ground on the great sea that divided two mighty commercial nations, yet a few days before she was to sail the German Embassy at Washington published the following advertisement in many American newspapers :

> Travellers intending to embark for an Atlantic voyage are reminded that a state of war exists between Germany and her Allies and Great Britain and her Allies : that the zone of war includes the waters adjacent to the British Isles, that in accordance with the formal notice given by the Imperial German Government, vessels flying the flag of Great Britain or any of her Allies are liable to destruction in those waters : and that travellers sailing in the war zone in ships of Great Britain or her Allies do so at their own risk.
>
> Imperial German Embassy, Washington, *April* 22, 1915.

In addition to this portentous notice many of the passengers who intended to sail by *Lusitania* received letters and telegrams of warning signed "John Smith" or "George Jones" emphasising, under the cloak of anonymity, the danger they ran. They were advised to cancel their passages.

Of course the open notice and the subterfuge that followed it

caused a stir in New York. To allay public feeling the German Embassy was asked the reason of their warning. " Lest harm should come to persons misinformed," was the reply. It could hardly be that Germany had any conscience to ease in what she intended to attempt—perhaps she did hope to forestall any protest if loss of life followed her attack upon the peaceful liner. At any rate *Lusitania* sailed with 1,959 souls aboard her, of which nearly 700 formed the crew. She carried 1,200 tons of general cargo.

During the voyage *Lusitania* was not driven at full speed, so she did not reach the danger zone until the morning of May 6. All boats were then swung out ready for lowering, and next day at two o'clock she was steaming at eighteen knots ten miles off the Old Head of Kinsale. The sea was smooth, the weather fine and clear. No one thought of danger, and the reduction of speed from twenty-one knots should have brought her to Liverpool at a convenient time for berthing.

Suddenly, without warning, a torpedo was seen rushing at the giant liner. It struck her between two funnels below the water line. There was a terrific explosion, clouds of smoke and steam bursting up from below, shook the mighty vessel from stem to stern. She heeled with the shock. At once a second torpedo struck her in the starboard engine-room. The work of murder and destruction was meant by the callous enemy to be thorough. A third torpedo was fired at the stricken ship, but it sped wide and passed harmlessly astern.

The Cunarder now began listing over, and Captain Turner, realising she was doomed, steered towards the shore. She was still moving fast, but her list was ominous, and when the order " Full speed astern ! " was given from the bridge there was no response. The engine-room was full of water.

So rapid had been the tragedy of destruction that it had become impossible to lower the boats while so much way was on. In them people clustered helplessly, waiting the opportunity for escape. Momentarily the list increased; the boats along the port side swung

The Track of the *Lusitania*

with their keels against the rail—the hapless passengers were thrown out on to the sloping deck, and as the great ship turned over yet more the heavy lifeboats, slipping off the rail, swung in upon the poor striving souls, crushing them beneath their weight. The savage had reaped his harvest.

It is difficult to write in cold blood any of the history of this fateful ship. She was now lying over thirty degrees, her speed had slackened somewhat and it was possible to lower some of the starboard lifeboats. About twenty of these eventually got clear, and as the water poured into the ship she righted a little, although her bow was almost level with the water. It was the last effort she made. Only eighteen minutes after she was struck—her great decks still thronged with helpless people—she plunged head first into the shadows of the deep, throwing her stern up as she disappeared from sight. Over eleven hundred lives were lost. Many corpses were picked up days afterwards still wearing their lifebelts; seven hundred and fifty-one in all were saved.

What was the object of Germany in this wanton outrage on innocent civilians? The answer seems plain. She sought to cover the obvious failure of her first plans which had been devised to scare all British shipping from the seas. At one stroke she aimed at making her so-called blockade effectual by terror. It was the stroke of a desperate maniac. The appalling news of the disaster spread abroad the same evening and the whole civilised world stood stupefied at Germany's crime. She had proved to what depths of moral infamy she had sunk.

This seems an opportune moment to analyse in detail the possible tactics of U-boats preying at random upon the commerce of the world. The submarines which attacked *Lusitania* had evidently been lying in wait off the Fastnet to carry out the threats uttered in New York. The German submarines when on patrol in the areas where the routes of merchant ships converge usually kept on the surface, though they were of course ready to submerge at short notice. They

generally remained under way, following zigzag courses, to escape the danger of being torpedoed by Allied submarines. The boat was thus enabled to proceed under her oil engines instead of using up her battery power for propulsion, as she must have done had she remained submerged. Besides, on the surface, the range of vision was very much extended.

When a merchant vessel was sighted the submarine manœuvred for a suitable position for attack, if possible ahead of the intended victim, because any alteration in course or speed could best be estimated, and, further, if the merchant ship was zigzagging the variations in her movements might be observed and the possibilities of her future movements anticipated. The U-boat then submerged—and generally steered a course parallel to that of her quarry. This enabled her captain to obtain an accurate estimate of the speed and course of the prospective victim.

The conditions of light and the state of the sea had to be carefully considered. In a long rolling swell it was almost impossible for a submarine, running with only her periscope showing, to avoid detection. The superstructure breaking surface caused a considerable disturbance in the water. On the other hand, if the sea was choppy and the submarine running before the wind the feather caused by the periscope tearing through the water was difficult to detect.

Should there be a choice of position for intended attack, it was better to look towards the light than away from it, because under such conditions the target stood out sharp and clear and there was also little chance of the periscope being seen.

A torpedo attack was most likely to be successful when delivered at right angles to the course of its target, and as the position for observation was necessarily ahead of the vessel attacked, the submarine slowed down before firing and allowed the victim to draw up towards her doom. The range chosen by the Germans to fire their torpedoes varied between five hundred and one thousand yards.

Bringing a torpedoed Hospital Ship into Port

After firing one torpedo, if the chances of detection were not too great, the submarine commander endeavoured to observe through his periscope the result of his shot. When it proved either a "dud" or a "miss," there might be time to fire again; but if there were danger of discovery the boat dived, say, to 150 feet and remained submerged for a considerable time. She ultimately escaped as far away as expediency dictated at her utmost under-water speed. She would later on come to the surface very cautiously to have a look round, provided she had reached a safe distance.

The later German submarines were armed with very formidable guns, and these enabled them to make many more attacks on merchant ships, because much more ammunition could be carried and torpedoes were not used needlessly.

When the British Admiralty was forced to arm our merchant ships the guns were at first comparatively small and often proved quite ineffective against those carried by the U-boats, which would make a practice of fighting at long range, carefully keeping just out of danger. If the crew of the merchant ship could be frightened into taking to the boats, the submarine would go alongside and place bombs on board the ship, which would sink her just as well as a torpedo, but at only trifling cost. When the U-boat was using her guns instead of her torpedoes she would first fire a trial shot, a careful observation being made by the spotting officer as to where the projectile struck the water. The range was then gradually increased until an "over" was obtained, when the sights were readjusted so that every shot should be a hit. Some of the largest submarines carried two 5.9 guns.

There was at first no means of meeting the German unrestricted submarine warfare. The value of the U-boat as an extended weapon of offence had not been seriously considered, for it was not thought possible that submarines could operate beyond the area of the North Sea. No effort had been made even to protect the main fleet bases from the under-water craft, so all the devices used, like the later

developments in the boats themselves, are entirely the product of the war.

Towards the summer of 1915 it became evident that the Germans had boats capable of undertaking extended cruises into the Atlantic. They threatened all the principal trade routes. Energetic measures had to be undertaken to combat this unexpected menace. There was a great shortage of small craft, and all our most useful destroyers were urgently required for the protection of the Grand Fleet. Some of the older boats were, however, fitted out with an anti-submarine sweep. This consisted of cylindrical charges of trinitrotoluene supported by wooden floats. Such a device was towed in concentric circles in the area where submarines had been located. The charge could be exploded upon contact, or as near the enemy as could be estimated, by an electric firing key.

This was a temporary measure, and it had several disadvantages. It was both difficult and dangerous to get out. There was the liability of fouling the propellers of the towing vessel with the great length of cable connecting the charges and floats; the sweep was also found to knock a great deal of the speed off the destroyers and produced excessive vibration at the stern. A large number of trawlers were fitted with this gear, but with their low engine-power they could not make much headway when it was in use.

Drift nets of steel wire were used in the channels known to be frequented by submarines. The boats employed were the usual drift-net fishing boats, and the methods were exactly those exercised from time immemorial to catch herring and mackerel. The boats were remarkable for the entire absence of the sickly odour of fish which is expected in all drifters. Some of the nets were provided with indicators, by means of which the presence of a submarine in the meshes could be detected.

On each quarter the peaceful-looking fisherman carried a grey cylinder full of trinitrotoluene. These were the depth charges, which would explode with tremendous force as soon as they sank

deep enough to fire the detonators. A depth charge explosion would give the submarine a nasty shock even if it were some distance off. The number of dead fish which come to the surface prove how far-reaching are the effects of under-water charges.

The Germans displayed much ingenuity when they turned their attention to net-cutting devices. Jumping wires were also stretched from the bows of the U-boat, over the superstructure, and down again to the stern. These enabled the submarines to lift the nets placed in their track or sometimes break the meshes. Our defensive measures arranged that the nets should be fitted with contact mines, which exploded when touched; so the deadly game went on.

CHAPTER IV

ANTI-SUBMARINE WARFARE; MINES; AN OFFICER'S LOG

AS the scourge of the submarine spread, practice with the lighter guns and certain exercises of battleships, such as dodging torpedoes, were carried on inside of Scapa Flow, so as to avoid risking capital ships outside; meanwhile the Navy had watched the methods of piratical warfare from under-seas settle down into a certain regular system. There was nearly always the same story: a sunken merchantman, with its abandoned crew, and German humour *in excelsis* at the *comic* position of the castaways left to chance in open boats and at the mercy of the waves. The Navy, to personify that great Service, smiled grimly as it set to work on a countering blow. It reckoned that the German U-boat commanders would be met with a device to match their own cunning.

There were many fleet auxiliaries in Scapa. They lay in a special anchorage ready for emergencies—to fetch and carry coal, oil, stores —the willing servants of the giants which went to battle. To them came a further opportunity, or, at least, to certain picked units from among them. It had been decided to use auxiliaries to destroy submarines, and as a first step each flagship arranged to have a merchantman fitted up in accordance with its own ideas and to send it out to hunt their enemies, so as to catch them in disguise in the midst of their nefarious and destructive work.

For the fitting out of these "Q," or decoy, boats, about whose deeds there clings the glamour of Elizabethan adventure, the Admiralty permitted the removal of some of the secondary armament of the older battleships. As quickly as possible the work was

taken in hand, and *Prince Charlie* emerged in consequence—a new-looking craft with powers that knew neither love, nor pity, nor forgiveness. She was Innocence armed to the teeth. Guns were mounted behind hinged screens amidships. If a submarine appeared, the screens fell down with a jerk, and the guns could be trained in any direction. *Prince Charlie* was only the first step towards this legitimate form of defence. She was quickly followed by the collier *Vala*, which added to her formidable armament a complete wireless installation. Only volunteer crews manned these vessels, for their mission was crammed with mystery and danger. When volunteers were called for the response was instantly made by officers and men from the Royal Navy, the Royal Naval Reserve, ex-merchantmen used to the game of chance and peril they would have to play. "Drake's drum" called them to arms, and they answered the summons.

Naturally, the first experiments grew by experience in all directions—fittings and the disposition of guns were altered; every bit of knowledge acquired was used to attain a high degree of efficiency. At first the decoy ship would steam into an area where submarines had been reported, keeping on a steady course till nightfall. In the darkness everyone on board went to work with a will, removing fixtures so as to alter the boat's appearance; lifeboats, ventilators, deck-houses were interchanged to new positions; funnel markings and other distinctive features were painted out. During the night course would be altered and, if necessary, the submarine area would be entered again in the early dawn of the morning. The direction steered had to be guided by any reports that were received. With the ability to receive and transmit messages, the sphere of influence covered by these boats was widened. Their operations were continually directed by the latest information.

The wireless apparatus fitted to "Q" boats was always used with an invisible aerial, so placed that even at close quarters it only looked like a part of the ordinary rigging, such as a top-gallant stay. One

particularly good example of a first-class "Q" boat fitted out at Scapa in the light of experience was *Penshurst*. This ship had a record of fine service before she was detailed for duty as a fleet collier. She had carried large quantities of ammunition to Belgium in the early part of the war, and had nearly been destroyed during an air raid while unloading explosives at Dunkirk. She was chosen as a decoy because, her machinery being well aft, she had the appearance of an oiler. The submarines were making every effort to cripple the Grand Fleet by sinking all oil-carrying vessels. It gives a touch of personality to *Penshurst* to remember that she had at one time carried passengers. There was a deck-house well "forrard" which had been their accommodation, and this proved a useful place in which to plant two guns. They were well above the water line, could be fought in all weathers, and had an all-round fire. In addition to the mess-room used by the gun crews, this deck-house also provided accommodation for the wireless equipments. The main hold was filled with coal packed to a solid mass. The hatches were decked over with strong timber, and in the centre was mounted a fairly heavy gun. Screens of wood and canvas concealed the lighter ordnance, while as to the big gun it lay hidden by the ship's lifeboat, which had been cut in two and placed fore and aft over it. There was a sling from the two halves of the boat leading up to a derrick supported by the mainmast. When the selected crew, trained to simulate panic, rushed to hoist out the boat and abandon ship, they uncovered the gun, which was mounted so that it could engage on either broadside.

The following is a personal account of a "Q" boat's activity:

At 3.30 on Wednesday, June 20, a convoy of twelve sailing vessels left Falmouth, escorted by the armed trawler *Harlech Castle* and the mystery brigantine *Probus*. It was arranged that the trawler should keep position one mile ahead of the sailing vessels, and *Probus* four miles astern of the last ship in the line. A course was set for the Heaux Light, on the coast of Brittany. A short time

Dropping Depth Charges on a U boat

A swept channel in the North Sea

after midday on the 21st the little fleet had reached N. latitude 49.26, W. longitude 3.56, steering S.E. by S., with a light south-west wind, and making about three to four knots. *Probus* sighted about four miles away on her starboard quarter what appeared to be a ketch-rigged vessel, steaming about the same course. The captain watched the stranger for some time, and found that she was altering her bearing considerably. Evidently she was not propelled by sails alone. All hands were ordered to stand by, and at 2.30 the ketch opened fire, her first shot falling about ten yards short.

Probus was at once hove-to, the hands sent to action stations, all guns cleared, and the boat made ready, the enemy keeping up a very rapid fire, her shells falling short mostly on the brigantine's starboard beam and bow. The foretopsail, aback, now caused the vessel to make a sternboard, and her head fell off to the westward. The enemy, evidently a German submarine, was now bearing between west and west-south-west, still firing continuously, and heading towards the south-east, crossing the brigantine's bow at what appeared to be a good speed.

The air was very clear, and the smoke of the escorting trawler and the sails of the convoy could no doubt be seen quite clearly by the German, who made no attempt to close, but kept up her incessant fire.

It was quite possible that the submarine could have steamed out of range and attacked the unarmed sailing vessels before the trawler was able to come to their assistance, so the captain of *Probus* gave the order: "Up starboard 12-pounder. Both engines ahead, and hoist white ensign." The range given was 3,500 yards, and the first shot fell about 500 yards short; but nevertheless the Germans immediately left their gun and made for the conning-tower. The range was now increased to 4,000 yards, and the second shot made a direct hit on the submarine amidships, sending up a large cloud of smoke and stopping her dead. The British ship was at once put on the other tack, and the port 12-pounder came into action, the

first, second and third shots all falling short, but the fourth, at a range of 4,100 yards, brought down the mast and sails of the German and raised another large cloud of smoke forward of the conning-tower, which, now that the gear was knocked away, came plainly into view. A number of rounds of common shell were expended, and then a change was made to lyddite, and when thirteen more rounds had been sent on their mission of destruction the submarine ceased fire; she could hardly be seen for smoke. A change was again made to common shell, and this was kept up until the submarine slowly settled by the stern and disappeared, turning over to port, a parting shot striking the conning-tower as it sank. Sub-Lieut. Walch and his operator, Musgrave, listened on the hydrophone, but all was silence.

The brigantine was still on the port tack, heading from west to west-north-west. The port engine was still going ahead, but the starboard propeller, having fouled the log line in the sternboard, was jammed. The spot where the submarine sank was dead to windward. The breeze was very light, and the ship, deep in the water, with 212 tons of coal, could only move very slowly. She was therefore put about and sailed once more in chase of the convoy, which was by this time a long way ahead.

The port 6-pounder had kept up a very rapid fire, and made many hits at the extreme range of the gun, Seaman Braund showing good judgment and firing twenty-nine rounds. The starboard 6-pounder fired seven rounds, the first four falling short and the remaining three hitting the after end of the submarine; Seaman Perry had his gun cleared away very smartly. The shooting of the port 12-pounder was very accurate, and the shots were falling all about the enemy, but after the change to lyddite there was so much smoke that it was impossible to see where the shells struck, though the common shells were seen to burst near the conning-tower; Seaman Pritchard was captain of this gun.

At 3.45 the escorting trawler was seen to be coming back at full

speed, and at the same moment what appeared to be another submarine was sighted in the north-west, about six miles off, steering south-east. The mate went up to the main cross-trees to watch the new-comer, which seemed to be smaller than the first U-boat.

As the submarine drew nearer she was seen to have an oval-shaped high bow and stern, and she was judged to be of the U C type, but as the trawler was now near, the enemy turned and made off to the north-east. There was a short conversation between the two escorting captains, and as the convoy was now distant it was at last decided not to chase after the retreating submarine, but to take up the old positions ahead and astern of the sailing vessels. The following night was very dark, with heavy rain and a flat calm, but at daylight a north-westerly breeze sprang up, and the little fleet arrived at Morlaix on the morning of June 24.

No one seeing the barquentine *Merope* under way would have taken her for anything but a peaceful merchantman. It is true that her deck-house seemed to run rather further aft than usual, and the spanker sheets, right in the middle of the boom, looked a somewhat odd fitting. As a matter of fact she could hold quite an interesting conversation by means of her mizzen topmast stay, which was really a concealed aerial. Once upon a time a U-boat met *Merope* coal-laden on the high seas. Not wishing to waste a torpedo on such small fry, the Hun opened fire with her gun, no doubt expecting to see a panic party hoisting out the boat. Nothing of the sort happened, however, but instead the flaps of the after deck-house fell over the side, disclosing quite a useful swivel-gun with a crew already at quarters. Another gun made its appearance by the fore rigging, and the white ensign broke out at the mainmast head. Before the unwary U-boat had time to go down, the shells came spattering all round. It was clear that the barquentine was a much more steady gun platform than the submarine, and the "Johnny Haul-taughts" had evidently been well trained at gunnery. The battle was short

and sharp, and that misguided U-boat now lies at the bottom of the sea. Both *Probus* and *Merope* were Sir James Startin's pets.

While the "Q" boats were being brought up to a state of efficiency other defensive and scientific devices were being tried. Perhaps one of the most important and interesting, so far as the future of under-water craft and navigation is concerned, will prove to be the development of the instrument known as the hydrophone. For many years it had been realised that water was a conductor of sound, and a certain degree of success had been met with up to the beginning of the war in registering sound conducted by water. The curious can trace the extent of research into the subject by following the tests carried out at Boston twenty years ago up to the paper read by Professor Fessenden before the American Academy of Arts and Sciences prior to 1914.

During the war a large number of different devices were developed. All depend upon the vibration of a flat plate or diaphragm, which is inserted into the hull of the vessel itself, or in some cases into a sort of fish which is towed astern.

It has been discovered that all bodies moving through the water emit a characteristic sound or vibration, dependent upon the speed at which they are moving and the power by which they are propelled. This sound can be detected by the use of special discs set to receive the sound waves, which vibrate in sympathy. It has further been ascertained that the vibrations set up by any auxiliary machinery working in a vessel are transmitted by the hull to the surrounding water, and can be clearly heard when suitable listening apparatus is used, although the vessel may herself be at rest. Sound travels through water in waves in much the same way as light does, though much more slowly. This fact enables the direction or source of the sound to be easily and accurately determined if more than one listener at a hydrophone is employed. The general practice has been to fit one or more pairs of these listeners to each ship as far below the waterline as possible, each pair being placed symmetrically opposite

Merope in action with a U boat

each other so as to obtain the best results. The following is a description of a personal experience by Mr. Wyllie.

I was once allowed to attend the experimental base where the hydrophones were gradually being brought to perfection by many workers. I was offered a trip in an old-type C class which had been fitted with different sorts of listeners. We boarded the submarine from the trawler's boat, climbing along the rusty rounded whaleback and into the conning-tower, which shut after us with a clang.

Soon we were slipping through the short, choppy waves of the Forth, which seemed, as I took my last look round before diving, to be rather more than usually deserted and empty. Except our own trawler splashing comfortably along on our port beam, there seemed nothing much in sight.

It was interesting to watch the helmsman steering by the ghostly reflection of a small section of a compass card which flickered in an uncertain twilight round the "lubber's mark." It was also delightful to watch through the conning-tower ports the ridge rope, all bright with glancing bubbles, stretching into the green mist of the turbid water.

I was allowed to turn the periscope round to make a sketch of our trawler abeam. She looked just as vessels do when you are swimming in choppy seas, more than half the time hull down, and often quite hidden by waves and spray. Now and again the periscope itself would take a dive, and this made you wonder when you were going to taste your gulp of salt water.

I gave up the drawing after a little, remarking, as I handed over the periscope to the proper look-out, that "I might perhaps be causing the ship to run headfirst into some unseen stranger."

By this time the officers who were carrying out the experiments were able to spare me one of the telepads, which I fixed over my ears and began to listen.

As I have said, there was nothing much in sight when we were

last on the surface, but when I had made my ears accustomed to the sounds it seemed as though I had passed from some quiet lane into a large hall full of people all trying to talk at once. I looked at my host with wonder. "Do you hear them?" he asked. "But which of them?" I answered; "there are so many." He beat time with his hand: "'Tummy iddy, tummy iddy, tummy iddy'—that's the ferry boat to Burntisland. It's quite distinct." "Well, there is one of them," I said, waving my finger in imitation of my host, "which is singing this song: 'Trr chunk, trr chunk, trr chunk.'" "That?" he answered; "why, of course, it's our trawler." There were plenty of others, tugs and tramps at Leith, motor-launches at Granton, and picket-boats right away up the Forth above the great bridge; each was talking to us in its own language. Had my ears been sufficiently trained, I might have translated each song. "I am a hopper; I was built at Greenock. Yes, I carry mud out into the deep sea. You can tell by my tune if my trapdoors are shut or open." Or the song of the M.-L.: "I am 331. I was built in the States. Guess there are five hundred of us; but I am under Jimmy Startin. He works us—yes, he works us, and we do things at times, don't we? My song—well, you'd hardly tell it from Brother Hun's U-boat at first, but you'll know which is which if you practise."

This is the song of *Quickly:* "Yes, I'm under Admiral Startin, too. He's K.C.B. now. He keeps a photograph of *me* in between the pages of his Bible next his heart. A Norse fisherman? No, not quite. I say! we got a Fritz the other day. 'Sh, I'll tell you. Fishing? Yes. Fritz was not quite sure he liked the look of us, but kept nosing round up-wind. The Admiral who was with us said, 'Now we will go to prayers,' but the skipper protested that the moment was unsuitable. 'It is my wish, if you please,' says Sir James, so we had our stand-up service, with hymns and prayers all proper, though all the time Fritz was working nearer and nearer. When the hands had put on their caps again the action began, and,

if you believe me, our second shot got them plump on the conning-tower. Soon he was all smothered in bursting shells, and now Fritz is sleeping the sleep of the unjust, but the Admiral keeps my photograph between the pages of Isaiah."

Both hydrophones and gear have improved greatly since those early days, and latterly a regular service of listening trawlers was organised, and some R.N.V.R. midshipmen, specially trained as listeners, were given a small knowledge of electric science, for the hydrophone officer was expected to keep all his fittings in proper order and ready for instant use.

These listening trawlers were painted a pale grey, and could be recognised at once by the "tin fishes" stowed on each quarter just abaft the mizzenmast. The little ships were armed with two mortars capable of throwing 300 lb. of depth charge. They shot out a bright red flame, accompanied by a puff of tawny smoke. The report was loud and out of proportion to the size of the weapon.

Hydrophone trawlers worked in parties of three, with a patrol-boat in attendance. The latter, owing to its much greater speed, was able to rush to any part of the engagement where its services might be required. The trawlers, when they reached the patrol area, spread out into a triangular formation, the sides of which might be from three to five miles long according to the clearness of the weather, the patrol-boat keeping station astern. The patrol went on night and day, but during darkness or fogs the sides of the triangle were reduced to one mile. Signals were exchanged by flags, wireless, telephone or flash lamp. Only one hydrophone at a time was used at night, and two in the daytime.

When the sound of a submarine engine was at last heard, up went the black flag. All "fish" were hoisted out, and at the same time the patrol-boat rushed up at full speed to receive the bearings of the enemy. These were telephoned by each listener from the corners of the triangle.

If the three bearings had been correctly given, they intersected at one spot, and towards this intersection of the bearings the patrol-boat steamed at full speed, dropping depth charges, throwing the spray high in the air, and filling any German crew submerged in that area with feverish anxiety. In the meantime the guns' crews in the trawlers stood to their bomb-throwers, to their 12-pounders, and the extra depth charges were made ready.

When a submarine received a mortal wound great volumes of strong-smelling oil would well up, calming the ripples and stretching down-wind in an ever-widening track; but oil on the waters was not an infallible sign of death. The German U-boat carried its fuel between inner and outer shells, and the crew proved often crafty enough to release the oil and sham dead at the approach of danger. It was always well to drop an extra depth charge or two for luck "and to make sure." Dan buoys were afterwards moored to mark the grave, and, if the water were not too deep, a diver went down to search the spot. A dead German or even his hat or a part of his uniform was considered quite enough to establish the fact that the patrol had done its duty.

The hydrophone patrol used to put to sea for four days, resting on the fifth day under the lee of some prearranged headland. Then there followed another four days at sea, followed again by five days in port to repair damages and take in coal and stores.

On patrol both patrol-boats and trawlers used to stop engines together for three minutes every quarter of an hour while the operators listened. The senior hydrophone officer gave the order for stopping and starting, but in thick weather this did not always work out in practice, and each operator had to watch his own clock and act accordingly. He was in communication with the bridge by telephone or buzzer, being himself in a sort of padded cabinet just behind, very stuffy, and smelling of ozone produced by the electricity. All the motions of the ship could be clearly felt, so in it only the most hardened were free from sea-sickness.

The Chase of the U-boat

Trawlers were not supposed to put into port on account of bad weather, though, as a matter of fact, it proved quite impossible to hoist out the "tin fish" when a big sea was running. The little fleet simply knocked about in its allotted area. All the crew except the professional fishermen were more or less seasick, and the great green waves came tumbling solidly aboard. Down below, the bilge water, rusty and evil-smelling, dashed wantonly from side to side. Steam and the savour of warm oil was everywhere. Probably the cook was a victim to such conditions, so block cocoa and biscuits would be the only food unless someone had been wise enough to bring a store of tinned meat. If you tried to stay on deck you were drenched to the skin, and when, tired out, you at last reached your cabin, you might find the drawers all unshipped and your change of clothes washing backwards and forwards over the floor in three inches of water. You climbed, shivering, into your damp bunk to find that the spray had come pattering down the ventilator over your bed, and you cursed your luck and wished for one yard of solid earth.

When the gale was over and the hydrophone patrol was once more in formation, with many wet garments fluttering in the rigging, the "tin fish" were hoisted out, and the operators, after a hasty warm in the stokehold, donned their telepads and carried on with the monotonous duty of listening for the beat of enemy engines which never seemed to come. Off duty you might perhaps catch a glimpse of some distant rocky coast, Calvados or even Cape La Hogue, lifted in the air by mirage. Sometimes tramp steamers, strangely and wonderfully camouflaged, would steam by, or French seaplanes and kite balloons might wave a friendly greeting.

Explosives dropped over the stern of surface craft proved most effective in dealing with submarines. These depth charges were originally simply a tin of trinitrotoluene attached by a length of rope to a float similar to those used by fishermen. When the submarine had been located or its wake became visible the attacking craft steamed to the spot and let go the depth charge. The tin con-

taining the charge sank until the line tightened and jerked out the detonator, when a tremendous explosion, throwing up a tall column of water, at once followed. It was necessary to steam away at full speed after the depth charge had been dropped. In the later patterns of depth charges the line and float were dispensed with and the detonator exploded by the pressure of the water. Still later anti-submarine craft were fitted with short guns adapted to throw these charges a considerable distance.

The *Vossische Zeitung* has published an article showing the colossal losses of the German submarine navy during the war. It states that of the one hundred and ninety-nine submarines lost seven were interned in foreign harbours and fourteen destroyed by their crews. All the others were sunk in the Atlantic, the North Sea or the English Channel. Over three thousand of the crews were drowned; several thousand had their nerves destroyed whilst serving and are now in mad-houses.

Mines of all descriptions, both floating and moored, have been used indiscriminately in all seas by the Germans, and as a result all preconceived ideas on the uses of these weapons of defence and offence have had to be altered. When the war broke out we had, it is true, a few old cruisers fitted for mine-laying, and some rather out-of-date mines, for at The Hague Convention the Germans declared that they would use these weapons when necessary. Up to 1914 we had only intended to use mines for the defence of harbours. The old submarine mining branch of the Royal Engineers had been disestablished, and though the steamers and gear had been handed over to the Navy very little had been done with them. The Government grudged the money that this branch of the service needed. Indeed many sailors considered that the torpedo and submarine had rendered the mine unnecessary, and large stocks of mines and apparatus had been scrapped shortly before the war began.

The view held by the enemy on this subject was entirely different, and there can be little doubt that a considerable number of German

A German Mine-layer

mines were scattered about the North Sea, if not before, certainly at the moment when war was declared. Germany had several of her large liners specially fitted up for use as mine-layers, and in addition she seems to have utilised the services of neutral vessels for the same purpose. Some of these laid mines as far afield as the Cape of Good Hope and the Indian Ocean. It was even thought that ships flying the red ensign were engaged in this work, a dastardly aggression against the canons of sea warfare, but Germany had made no secret of her intention. Enemy mine-laying in our home waters, largely owing to the thorough system of well-organised patrols, was for surface ships an extremely hazardous proceeding, and only on one or two occasions was the work successfully carried out.

One of these attempts on the part of the enemy was in Moray Firth. The raider *Meteor* (which in happier times used to carry large parties of German tourists to the coast of Norway, and even to Spithead and Portsmouth) succeeded in putting down a large minefield on August 7, 1915. When our armed boarding vessel *Ramsey* came on the scene she was engaged and sunk. Several naval craft were also sunk or damaged by these mines. Owing to the position in which the Germans had laid their infernal death traps it was found possible to leave a great number of them undisturbed by sweeping a channel through them up to Cromarty. This German minefield served in some measure as a defence against the U-boats.

The raider *Moewe*, disguised as a neutral trader, succeeded in evading all the patrols and laid a large number of mines off Cape Wrath. This seemed an unlikely spot as the water is deep, the bottom irregular and the tides strong. But it was a converging point for traffic, and the pre-Dreadnought battleship *King Edward VII.*, flagship of Admiral Bradford, on its way from Scapa Flow to Belfast, fouled one of the mines beneath her starboard engine-room. Tugs and destroyers rushed to the spot and rescued the crew; the ship slowly turned over and sank six hours after the explosion.

A new danger appeared when the Germans developed a mine-

laying submarine. The possibilities of these under-water craft were always being underestimated and their ability to lay mines also overlooked. On several occasions mines were discovered in most unlikely places. It was some time before it was proved that these had been dropped from a submarine specially constructed for the purpose, and it became clear that no harbour entrance or channel would be safe unless periodically swept. This difficult and dangerous work had to be systematically undertaken. It entailed a vast organisation, the establishment of naval bases and depot ships in all the important harbours of the United Kingdom.

Our picture facing this page shows how the menace was met at Portsmouth.

Through this great war, as can be seen, all our force was centred in the north. Every precaution, however, was taken in the south, and there was much activity on the part of smaller craft. For instance, the "Port's Mouth" of Tudor days was defended by a "mighty chane of iyorn," which was hove taut by capstans on shore when the king's enemies made their attacks. The modern representative of the old boom was a net of steel wire, which in fogs and darkness was lifted from the bottom by powerful steam engines on each side. Every morning during the great war the little mine-sweepers (converted picket-boats) would wait inside the harbour for *Victory's* gun, which gave the signal for the net to be dropped and the port opened to traffic. As Nelson's old flagship gave the word the six-inch wires would rush through the fairleads, the net collapse, and the black balls drop from yardarms; then the mine-sweepers rushed through the gap to do their appointed work outside.

For the mine-sweeping the Admiralty requisitioned a great number of trawlers and all available paddle-steamers. The light draught of these craft made them very suitable for the purpose, because vessels drawing only a few feet run little danger from mines. It was found necessary to sweep our waterways constantly; sometimes once a day was not enough. In northern waters there were cases on

Old Portsmouth : Mine-Sweepers putting to Sea

record in which enemy submarines actually followed the sweeping vessels and laid fresh mines in the swept channels. Fortunately these were invariably detected before any damage was done.

During the month of May, 1915, all the destroyers of the Grand Fleet were engaged searching for U-boats round the northern coasts. Both officers and men carried on their endless work with wonderful energy and pluck. They patrolled all day and kept watch at night with their searchlights. The battleships meanwhile stayed longer in port, while their destroyer screen pursued the business of chasing submarines. The Third Battle Squadron, however, went for a cruise in the North Sea, and, on returning, two enemy torpedoes were fired at *Dominion* without result. Our mine-layer *Orveto*, with some destroyers, then went to the Heligoland Bight to give the Germans a taste of what we could do with mines.

Afterwards the whole of the Grand Fleet from Scapa, Cromarty and Rosyth met together in the North Sea and carried out the usual sweep with the now familiar result.

The big battleship *Queen Elizabeth* arrived from the Dardanelles and joined the Grand Fleet. She had about fifteen hits made on her by the Turks with 6-inch guns and some others with field artillery. Quite a pattern had been made on the wardroom deck and bulkhead; one Turkish shell, with a part of the plate where it struck, had been cut out of the ship just as it stood. This had been mounted as a trophy, and always kept bright and clean.

By this time the expectation that the High Sea Fleet would come out and fight a pitched battle was beginning to give place to the idea that the Germans were more likely to stay behind the protection of their forts and minefields while the U-boats cruised in our trade routes and did their best to wipe all merchant ships and fishing boats from off the face of the waters. In the Grand Fleet also it was found possible to spend more time in port. Scapa Flow, Cromarty and the Forth were now protected by nets and other submarine obstructions, and so the crews of battleships, cruisers and

destroyers took more rest between the sweeps and exercises than was possible in the earlier part of the war.

On June 11 the Grand Fleet steamed to northern waters for gunnery practice and battle exercises—a sort of sham fight. *Campania*, of the Cunard Line, which had been fitted up as a seaplane carrier, went to report the position of the supposed hostile fleet. This was the first time that seaplanes were used with the Grand Fleet.

The following is a short description of the cruise taken from the log of an officer on board one of the battleships:

"We steamed away on a lovely night past the beetling red cliffs, the Old Man of Hoy standing a thousand feet out of the sea. Fritz had been reported off Dunnet Head, but we saw nothing of him.

"*June* 12.—Having slept badly in the casemate, I had a rotten head. General quarters in the morning watch; bitterly cold. In afternoon carried out firing at a towed target. There were a few breakdowns, the director training missing step. We are speeding towards the Pole and have reached 64.50 N. At 10.15 p.m. the sun was just touching the horizon. Went to bed until 11.20, then alarm and night firing; as usual hopeless. We did not require the searchlights. It was broad daylight the whole time. Quite ready for bed at 4 a.m. It *was* cold.

"*Sunday*.—There is a lot of water in the casemates, for a fair sea is running. Kirk was made exciting by a wave coming in amongst the congregation and taking a number of men off their feet. The padre picked up one, and most of the fellows got wet up to their knees.

"General quarters and control drill for most of the day, and then P. Z. was hoisted for exercises—fighting the Germans.

"The whole fleet remained in the day formation during the night.

"*June* 14.—A glorious day. Big P. Z. action with an imaginary enemy. The Staff of the Commander-in-Chief had prepared a great number of letters which were to be opened each at its appointed time

Benbow with sister Battleships deploying into line

by the officers on bridges, in fire controls or in many parts of the ships. The first envelope might contain the words, 'Heavily engaged.' Ten minutes after another packet would have to be opened, containing the laconic message, 'Straddled.' It was most instructive, for you could see just what each officer would do in each emergency and how each ship was handled to meet the menaces foreshadowed in the mystic envelopes. 'Submarines on port beam,' a realistic touch this.

"At noon we started off for home at eighteen knots. It was some sight. A hundred ships together, if not more—really wonderful. Soon we were racing along under the cliffs, and got through the gates at 8.20. Home once more.

"*Dreadnought* is here. She jolly nearly got another submarine off Dunnet Head. Pierce was on watch again. Apparently she was steaming along at sixteen knots when three feet of periscope ahead was sighted. Increasing speed to twenty, the ship went for it, the U-boat diving just in time to save herself; but I hope she may not have cleared.

"*Tuesday, June* 15.—Up at 4.50. Coal ship; 720 tons finished at 9.20. The sunsets are glorious. At 11.30, as I opened my scuttle, there was pale lemon and orange all along the northern shore of the Flow. To-night as I was hoisting in the barge the sky over Hoy was wonderful.

"Heard of Horton and Lawrence in the Baltic and E 1 off Heligoland. The Hoch Sea Fleet have only once been out."

Now that the strenuous days were over and the hard-worked crews were able to take things easy, all sorts of sports, plays and concerts were organised to keep everyone merry and bright. One would never believe there was so much talent among the ships' companies unless some of the wonderful productions had actually been attended. The plays for the most part were written on board, the costumes, make-up and wigs home-made. The beauty chorus, played by midshipmen and young seamen, was most fascinating. One

wondered how these ladies came to have such intimate knowledge of such a complicated matter as putting on a mooring swivel. The captain's coxswain brought down the house as Helen of Troy, and the villain corked his brows and was as audacious as any sensational novelist could wish. To quote again from our officer's log:

"The Fleet Boxing Competitions took place on the Island of Flotta. They would not have been better at the N.S.C.

"Apart from these amusements, the Archbishop of York took a drum-head service and gave a splendid address to the men, telling them what they were doing and what it meant to England and the world.

"A day of surprises—21.6.15. Divisions just sounding off when the signal came, 'Land available men,' then 'Man ship.' Why? 'His Majesty is coming,' suggested one. And it was so. We fell in aft, and the captain said a few words to us. H.M. the King is to visit the Northern Base. He will pass through the lines on Wednesday, and inspect all the divisional ships' companies on board the division flagships on Thursday. Strict secrecy is to be observed, and no cameras are to be used. We had a full-dress rehearsal of man ship and cheer ship, which was repeated a good many times, then 'in boats,' for we are all at two hours' notice for eighteen knots.

"It is now as I write dead calm. The cries of the gulls are the only sound. There is a red glow in the N.W. Ward Hill is beautifully silhouetted, with its clear-cut skyline. The hundreds of colliers and store-ships stretch nearly up to Hoy Sound. Now for bed.

"July 7 was a dull day, with a gradually increasing north-easterly wind. There was another rehearsal at manning and cheering ships in the forenoon. At 3.30 the King was reported coming down the lines in *Oak*, with his attendant flotilla, led by *Blanche*. A splendid sight.

"As the King came abreast of each ship there was loud cheering.

Battleships at Target Practice in the Atlantic

"July 8 broke dull. The men from *Bellerophon*, *Temeraire* and *Dreadnought* came on board the flagship *Benbow*, and by 10.15 they were all formed up. His Majesty came alongside soon after, and the officers and men of each ship marched past in file. When every man had made his salute, the King went on board *Orion*, where the men of the Second Squadron were ready, and the operation was repeated; then to *King George V.* and *St. Vincent*. His Majesty lunched in *Marlborough* after a very busy morning. By these means a big proportion of the men of the Grand Fleet was able to march past their King."

(Here is a true story of an incident at the Royal Review. There was a dog—a great fighter—by the name of Bounce. He followed his ship's company when they were transferred to another vessel for His Majesty's inspection. At the great moment, when everyone was standing to attention, the shameless Bounce burst into the midst of the solemn ceremony in deadly combat with a German dog rescued from a sinking prize, whose name was, of course, Fritz. There was consternation on the quarter-deck, but the King made everything easy by saying, "Ten to one on the bull terrier.")

"All this time Welsh coal miners were playing into the hands of the enemy by striking. The movements of the Grand Fleet had to be much restricted in consequence.

"A German submarine was reported a mile from Hoxa Gate, just as the First Battle Squadron were going out, but this, upon investigation, turned out to be a ship's boat floating bottom up. *Speedwell* was reported to have rammed a U-boat, a glancing blow on the quarter, but as both vessels were moving in the same direction it is doubtful if the Hun was badly hurt. There were no British merchant ships sunk this week—a bit of a record.

"*Calliope* was rushing round Scapa Flow at high speed, with her attendant destroyers, trying her torpedoes and making a regular surf.

"There are rumours of German prisoners on board *Cyclops*, so

it is supposed that a submarine or two has been caught in the nets."

The destroyer *Lynx* struck a mine outside Scapa on August 28. The whole of the forepart of the ship up to the foremost funnel was blown away, with the captain and all the men on the bridge. Shortly after the explosion the foremost boiler went. The after boiler also blew up, but in the meantime two rafts were got over the side, and all the survivors climbed on to these, and after thirty-one hours three officers and twenty-one men were picked up by a steamer, which at first mistook the castaways for a German submarine and turned away from them. A sailing ship in tow had passed them close, but it was impossible to attract their attention. Some of the men had meanwhile lost their reason, and so were drowned.

The German mine-layer was afterwards caught, and blew herself up in the North Sea.

The Entrance to Scapa Flow

CHAPTER V

A VISIT TO THE FLEET.*

IT was a privilege to pay a visit to the Harwich Base, with the depot ship *Ganges* as headquarters. This vessel in her time was an important unit of the fleet. She had been heavily rigged with five masts in the days when it was considered important that the men of the Royal Navy should be fully trained in the old-fashioned seamanship of bygone times.

Steam was in use, it is true, when she was built, but was regarded with disfavour; masts and sails had still to be carried, and an immense amount of trouble taken drilling the men to cross top-gallant yards and make all plain sail in the shortest possible time. In the light of later events most of the time thus spent was wasted. These ships were not designed only for sailing, as our old wooden walls had been; they were built to carry heavy armour, guns and engines, and proved most unhandy under canvas. It is said that *Northumberland*, one of the sister ships of *Ganges*, missed stays fourteen times when trying her rate of sailing. After that she refused to wear. Prejudice, the child of ignorance, dies as hard in naval development as it does in all attempts at progress.

The war work of *Ganges* consisted in acting as a depot ship for trawlers and drifters patrolling from the Harwich Base towards the German coast.

Most of her officers had joined for hostilities only. They belonged to the R.N.R. and R.N.V.R., and were generally away

* By the kindness of Mr. A. J. Balfour and My Lords Commissioners of the Admiralty, Mr. W. L. Wyllie was permitted to join certain ships of the Grand Fleet, and make studies of them under actual war conditions.

for three or four days at a time in the wild North Sea, patrolling in armed trawlers, sweeping for mines, or working with the drift nets for submarines—a life of desperate adventure. They returned with drawn, set looks upon their faces, sunken eyes, and grimed wrinkles, showing clearly through the crusted salt that strenuous days and sleepless nights had been their portion.

During a run in a drifter attached to *Ganges* a net was shot which had meshes far too large for any fish ever hatched. The floats for supporting it were glass spheres, which seemed always to be coming adrift, and the lengths of net were fastened together with lead tape rolled round the wire in such a way as to yield when any strain came on the net. T.N.T. was handy in neat, small troughs, and when an unwary "Fritz" had the ill luck to poke his nose into the meshes he might expect a shock as the detonator attached to every charge reached its proper depth.

The skipper and crew of this boat were Scots, and what might have seemed hardship to many a man connected with the sea was only ordinary everyday work to men hardened by east coast storms. They had been in drifters all their lives, and although the quarry they pursued could not be classed as herring or mackerel, the method of its capture was much the same.

Life even in a depot ship in war time is strenuous, because of many emergencies. Sometimes a message comes from beyond the sandbanks telling of engagements, a mined vessel, of survivors, the number of wounded, or some craft out in a gale that is trying to salve a torpedoed merchant ship. Harwich is no place for the disabled; "Tell him to try if he cannot get her into Tilbury." The next day the poor tramp is brought in. Two of her crew are dead. She has a jagged hole in her broadside large enough to admit a good-sized boat, while the water washes in and out of the empty hold.

Now and again during the evening the wardroom bridge party suspends play for a few moments while they listen to a shipmate who is seeking a warm bath and a quiet night. The talk is of

disastrous explosions, hairbreadth escapes, or of the masts of sunken ships which mark a certain north-east spit, the dreary emblems of force astride in what was once a world of peace. Or again, an overstrained officer arrives describing how a Zeppelin had passed over his trawler quite low down. Though his sergeant of the Royal Marine Artillery is a crack shot with his 6-pounder, the gun at the critical moment jammed. It is small wonder if he is almost overwhelmed at the loss of a conspicuous triumph.

Once a submarine came into port, followed at a respectful distance by her prize, a German fishing craft. The crew, typical Huns, loafing against their chart-house, their hands deep in their pockets, remained impassively regardless of the cheers which greeted their appearance.

These men were afterwards brought on board *Ganges* and questioned in the commander's cabin. They displayed the usual lack of imagination and thoroughly believed their nation's innocence. They informed us, amongst other things, that the Germans did not begin the war, and that they only marched into Belgium after it had been occupied by British troops. That remained their sole excuse—they were the slaves of an immoral and unscrupulous system. To their captors' discomfort, it was over a week before these unwelcome and unwilling guests were disposed of as prisoners of war. During the time they remained on board they produced the most mournful sounds from a sort of accordion which they had been allowed to bring with them from their trawler. The watch on the Rhine had ended—perhaps they played its requiem.

In this base there existed the utmost goodwill, the permanent service men giving generous praise to the splendid work their temporary comrades were doing with the small craft and the fishermen crews, who took their knocking about on the Dogger Bank as quite a matter of course. They turned up at all times and in the most unexpected places. All through the North Sea armed trawlers might be met on patrol or sweeping duties; drifters lay to nets which seemed to stretch for miles and miles. If the German submarines

grew scarcer, and their best efforts at new construction failed to keep pace with their losses, it was all due to the heroic self-sacrifice of officers and men controlling ceaselessly the smaller craft of Britain's ever-growing might.

Here is an extract from a song which was very popular in the Grand Fleet during the great war. It was sung to the tune of "A Little Bit of Heaven," and the words "Scapa Flow" were yelled *fortissimo* by the whole of the audience, showing the distaste of many men for the northern base:

"Faith, a little bit of garbage fell from out the sky one day,
And flopped into the ocean in a spot up Scotland way,
And when their lordships saw it—oh, it looked so bleak and bare—
They said 'This is the spot; we'll have a Naval Base up there.'
So they littered it with colliers just to make the matelots work,
And with depot ships and oilers, so destroyers shouldn't shirk;
They guarded it with mines and nets, with gates to come and go,
And when they had it finished—sure, they called it SCAPA FLOW."

In the Grand Fleet itself the atmosphere of strain and hardship had by this time given place to a feeling of preparation rather than that of actual war. The men who had been cooped up on board ship, with little or no leave since the war began, were always training, often swinging round the great barbette guns and aiming at all sorts of moving marks. The long muzzles seemed as mobile as the fingers of a hand. "Action stations" only had to be sounded, and the whole ship was made completely ready for battle. Everywhere men ran to their stations, where they remained waiting for the next order. A tour through the ship on these occasions proved full of interest. The way lay through the conning-tower, transmitting-room, turrets, casemates, over sloppy decks, through watertight doors, down steep ladders, and right into the very bowels of the ship. Everywhere each man stood at his post, silent in the semi-

A Light Cruiser off Scapa Pier

darkness. In the special dressing stations the surgeons in their white overalls were ready at the operating tables. The commander and his fire party, in gas masks and fearnought coats, reminded one of the familiars of the Holy Inquisition. The carpenter and his mates and the blacksmith waited for repairs. Signalmen below the armour deck remained by the telephone, alert to hoist any flags required, while wireless ratings listened for dots and dashes in the small wireless cabin close at hand. In magazines, ammunition hoists, torpedo flats, store-rooms and indeed everywhere men stood silent.

Even when not actually at "action stations" the same incessant training was in progress. Every morning the crew doubled round the decks, keeping step to the big drum, whilst the band played ragtime tunes. Then in the afternoon there were cutter races and high-class boxing bouts. For one special match drifters brought spectators from all the ships of the fleet. It was grand to see the athletes in shorts doubling round in the twilight to keep themselves fit. This was a self-imposed exercise, quite distinct from that described earlier, and is only taken part in by the boxing and football enthusiasts.

On one occasion four battleships, escorted by destroyers, proceeded to sea for target practice at a mark eight miles away. Steaming at twenty-two knots, the 15-inch guns fired in salvos, sending columns of spray hundreds of feet into the air in the misty distance. But even a more memorable experience was to be found aboard a battle-cruiser in one of a squadron of three detailed for a sweep, zigzagging towards the coast of Jutland in a strong northerly breeze. The waves buffeted the torpedo net shelf all through the night, and the swish of water pouring from the forecastle seemed everlasting. Soon after daybreak this battle-cruiser squadron spread far apart, and the guns' crews of the different ships exercised, using one another as targets. The battle was, however, all dumb show, for none of the guns was fired. As the morning wore away, the high land of Hoy appeared again as a faint outline just above the horizon, and soon the

squadron closed and formed line ahead. One by one other islands of Orkney rose out of the sea, with the long, low line of Caithness away down to the south-west. When the ship neared the Pentlands the treeless hills took on shape and colour, while the huge breakers dashing over the Skerries and thundering at the feet of the rocky cliffs appeared clearer every moment. A wreck lay on Muckle Skerry, bleached and waterworn, with decks warped and twisted and masts askew—a prey of the sea, relentless either as friend or foe, mighty in harmony, but mighty in discord too. Then the fierce tide-rips of the Firth came surging round the ship, which shortly afterwards, rounding Brough Ness, steamed past Swona and the steep cliffs of Herston and Harraborough. Many trawlers were patrolling outside Switha, and the Hoxa gates opened as the ships approached, and let them through to the wide expanse of Scapa Flow.

As a stretch of water the roadstead is almost unique. All the navies of the world might anchor there at once. The depth of water is uniform, and the holding-ground so good that ships never drag their anchors even in the strongest gales. They ride always head to wind, as in an inland lake. Though the tides race through the Pentland Firth with such fury, once inside the Flow the currents are hardly perceptible. Passing round the Calf of Flotta, the whole of the Grand Fleet came into sight. So mighty did it become in its completeness, it seemed composed of war ships of every build and class.

At this time, between Cava and Risa, a great fleet of transports and supply ships was lying at anchor, and close by that curious assembly of battleships and cruisers known as the "Dummy Fleet." It was during the first weeks of December, 1914, that this Dummy Fleet made its official appearance. There were "Queen Elizabeths," "Iron Dukes," "Orions," etc., amongst the battleships and "Lions" and "Tigers" amongst the battle-cruisers. The obvious use of these vessels was to deceive the enemy as to the disposition of the fleet—a gigantic camouflage. So these vessels used to steam

Scapa Flow: Ships sunk to Obstruct an Entrance

solemnly in line ahead, making much smoke and disturbance. An appropriate escort of destroyers was told off to accompany them, making a brave show at sea. Though their speed was very slow, they evidently, judging by results, proved impressive.

One of their uses as decoy ships for submarines led to many incidents that could be recorded of how these vessels put to sea in broad daylight steaming in a westerly direction, whilst the real fleet, under cover of dusk, stole away to eastward.

On several occasions this squadron was taken into an area known to be frequented by under-water craft, and there proceeded to carry out fleet manœuvres until an enemy appeared. This would be the signal for the escorting destroyers to make off, thus allowing the submarine an opportunity to attempt an attack which resulted in its own destruction.

One of the most noted of these dummies was a well-known American liner in pre-war days. She was built up to represent *Tiger*, and was steaming in a distant sea when a neutral merchantman was sighted on a parallel course. This ship, evidently anxious to obtain the protection of the "battle-cruiser," closed upon her, and the captain of the dummy, not desiring a too close inspection of his ship, turned away. The merchant ship altered course also, but this proved too much for the dummy's skipper, who signalled: "What do you want?" There was no reply to this, so he then made: "If you do not go away I will open fire." Even this signal had no effect. The attentions of the stranger were still persisted in, so a shot from the 3-pounder gun was sent across her bows, causing her immediately to haul off.

The gun which was used on this occasion was the only firearm on board this formidable looking sham, which at another time was used to scare the Turk by steaming backwards and forwards on the horizon in front of one of their ports whilst a cruiser armed with 6-inch guns went close inshore and bombarded the enemy. It is said that this prevented the hurrying-up of reinforcements urgently

wanted to support the Turkish army, which at that time was being heavily pressed by the British in Palestine.

This vessel was destined for a tragic fate, being ultimately sunk in the Mediterranean by the Germans, who reported that *Tiger* had been destroyed. There is a yarn that the crew, when their ship was going down, climbed on to B turret, which floated away safely.

At Scapa these motley vessels were moored where they would be visible to any enemy or prying neutral looking up Hoy Sound, so that the British might always be reported in harbour.

When the new ships of the "Queen Elizabeth" and "Revenge" class had joined the Grand Fleet it was no longer necessary to maintain the dummy fleet in home waters, and the ships which made up this most interesting although unwieldy squadron were either dismantled or sent to act as "guard ships" at the Dardanelles.

Scapa Flow, as the chief base through 1915, was full of animation and bustle. Besides long parallel rows of battleships and cruisers, there were trawlers three and four deep all the way up Long Hope. In Gutter Sound the destroyers were secured in pairs in the "trot." There were also parent ships and repair ships, floating workshops and tugs. It is impossible to give an idea of the vastness of the area or the multitude of the craft. The rushing picket-boats, the brawny crews training for races in cutters, gigs and whalers or the boats under sail working their way through the crowd, with submarines going in quest of information among the deadly mine-fields of the Heligoland Bight.

In the midsummer days it was never really dark so far north, and although night firing-practice was carried out by the ships, it was never the real thing. Away on the eastern horizon a distant view could be obtained of another fleet—the lines of merchantmen hastily sunk in Holm Sound to prevent the U-boats from entering the Flow. They looked very desolate lying with their decks awash, funnels and masts all rusty and beaten by winter storms.

In the summer of 1915 a new ship of the "Queen Elizabeth"

Picket Boats, Trawlers and Battleships in Scapa Flow

class joined the fleet at Scapa, looking magnificent in her fresh paint steaming in against the russet and green of *Pomona*. In this way the might of Imperial Britain was ever increasing—by patrol-boat and destroyer up to the invincible leviathans which are the final arbiters of sea power and sea control.

When sailors speak of Scapa they generally leave an impression of a group of the most desolate islands among which there is nothing but hill-side and rock. On the contrary, the roadstead appears to many a very beautiful spot. The high lands of Hoy always attract the eye, whether snow-capped in the short days or silhouetted against a summer sky. There are no trees on the islands excepting one in the main street of Kirkwall, which is most carefully guarded, but the islanders make the most of the peaty soil, as nearly the whole of the land is highly cultivated and all the people seem fairly well to do.

The water round these northern islands is a beautiful green and the clouds are brilliant in colour, while broken rainbows often play between the distant hills. On Flotta there are football fields and golf links, the only objection to these being that in the circumstances everyone wishes to play at the same time.

On the island of Fara some admirals and captains clubbed together to make a garden, and in the early days of the war could have been seen piling up peat sods to build a wall for shelter against the winds, or bedding out flowers in neat borders. One of the old cottages had been plastered over and turned into a pleasant tea house. The name of Fara Park was given to this out-of-the-way spot, and on fine afternoons the admirals' barges could be seen towing skiffs in for a picnic ashore.

Quantities of driftwood had accumulated at the high-water mark. Packing cases of all sorts and even articles of furniture were thrown overboard from the ships, and it is on record that certain craft, hurriedly disposing of their peace time material comforts in anticipation of action, were very pleased later on to do a bit of salvage

work amongst the wreckage to try to regain some of the articles so ruthlessly thrown away.

On another part of this island there grew a rival garden to Fara Park, tended by some warrant officers, who, instead of piling up peat sods, had built wind screens of driftwood, which proved a great success. To suggest that the gardens on the west side of the island were better than those on the east called forth no resentment, but only the answer: "What can you expect? Those men belong to a harbour ship; they give their whole time to it."

Sometimes ships anchor in the north-east corner of the Flow, in what is known as Scapa Bay, and it is then possible to walk across the narrow isthmus to the old-world town of Kirkwall, famous for its Norman cathedral, which is built entirely of red sandstone. Just when the war broke out this building was in process of being restored, and the scaffolding round the tower was a useful landmark for many of the ships. The coming of the fleet to Scapa made a lot of difference to Kirkwall, and many of the shops which before the war boasted only one small window blossomed out into plate-glass shopfronts.

In addition to the joys of Kirkwall, which were open only to the favoured few, easy route marches were organised, and opportunities given for the more active of the crews to reach the distant hill-tops, whilst the less energetic members fell out and rested on the wayside to await the return of the climbers.

One fine afternoon the fleet got under way and steamed once more towards the Hoxa Gate. The trawlers holding the gate had slipped their warps and stood with their lines of floats leading up-stream. The gate was wide open to the sea, and the ships were soon out on the turbulent waters of Pentland Firth, rushing in great eddies and swirls among the Skerries. When Duncansby Head had dropped astern the ships started to zigzag towards the south, avoiding one unholy part of the North Sea where mines were known to have been laid. Course was altered by whistle, the flagship blowing one

Light Cruiser passing through Blackrock Gate, Firth of Forth

short blast when she turned to starboard and two short blasts when she turned to port.

One morning, steaming through a glassy sea under a hazy sky, lines of drifters hove in sight. They seemed to stretch away for miles on each side, and not long afterwards the fleet was steaming between the Two Suitors, great bluffs which guard the entrance to Cromarty. Just at the opening was another gate, and, once inside, the ships moored in line ahead close to a squadron of light cruisers. Admiral Jellicoe, with his flagship *Iron Duke*, was in the great floating dock off Invergordon, but the weather was thick day after day, and all that could be seen of the great Commander-in-Chief was his searchlight from time to time flashing his orders through the mist.

While at this base it was arranged that the squadron should go to target practice with *Queen Elizabeth*, and as soon as the weather was clear enough the huge trellis targets were towed out into the Moray Firth eight or nine miles away. The water was beautifully calm, and the sight of the great battleship turning to port and firing four of her tremendous guns in one salvo provided a mighty spectacle. The destroyers circled round her all the time, throwing the spray from their bows in glistening white. After the great detonation there came a pause, and through the glasses four huge columns of spray could be seen to shoot up close to where the targets were being towed. The battle-cruisers then took part in the game, and fired from 12-inch guns. As soon as the shots had been signalled *Queen Elizabeth* once more shot out her great tongues of vivid red flame amid columns of tawny smoke. England's power, articulate, spoke in those mighty guns.

The following is a personal description by Mr. Wyllie of the end of his visit to the fleet, and it gives graphically the great impression made upon him :

In order to obtain a realistic impression of the firing of the battle-cruiser *New Zealand* which was just ahead—it was necessary to take up a point in the captain's bridge cabin. The sea and sky of the

picture had been washed in. I was holding my water-bottle tight in my hand because I knew when it became our turn to fire it would surely be upset. Just as the yellow smoke of *New Zealand's* salvo was being washed in *Indefatigable* let go with four guns. The immediate result was to spurt the water over the flat blue sky, while showers of black dust came from the paintwork of the cabin, and a batten broke adrift from the deck above and came down with a run on top of the ruin. Sketching from the bridge just over a 12-inch gun in action is not easy.

When the target practice was over our subdivision steamed away for the Forth, still screened by the escorting destroyers ahead and on both sides. Early next morning, putting my head out of the scuttle, I saw Arthur's Seat and Auld Reekie, with the Castle and the Calton Hill half hidden in the mists. We were passing through the Blackrock Gate, and long lines of moored trawlers with their nets and floats stretched away towards Granton, where Admiral Startin had his base of trawlers, motor-launches and decoy ships. The water had changed from blue to mud colour, and soon Inch Mickery and other rocky islands slipped by, with wooded Cramond and the seemingly endless lines of piles driven in on the flats to protect the Forth from submarine and torpedo attack. The woods of Dalmeny next shut out the distant Pentland Hills, and a moment after we were steaming under the great Forth Bridge, festooned with wires, supporting nets and other anti-submarine defences, which hung to the structure of the cantilevers like a gigantic spider's web. Electric capstans, actuated by the power station on the Fife shore, were ready to haul the nets back into position, and 10-ton counter-balance weights hung high overhead to give a helping hand. The grey roofs of South Queensferry, the post office hulk, Lady Beatty's yacht (now turned into a hospital ship and painted with the Geneva cross), all in turn glided by. Off Port Edgar, quite full of destroyers, our engines began to turn astern, and a moment after the weather anchor was let go with a resounding splash, and the

Battleships in the Forth

cable came rushing through the hawsepipe; many shackles ran out, and when at last the way of the battle-cruiser had been checked there came another splash as a second anchor was dropped. When the ship began to swing to the flood I got a moving picture through my scuttle. First, *Lion*, with Sir David Beatty's flag at the fore. Many hoists of bright bunting were mounting in graceful curves to her masthead, but as I looked my picture drew away to the left, the bows of the flagship were hidden, and instead the quarter-deck and ladder came into view. Crowds of seamen were busy as bees, barges and picket-boats were rushing up, and there was a constant coming and going of officers. But now this scene slipped farther to the left, and I had a splendid view of the foreshortened *Princess Royal*. All her guns were trained over to port, elevating or lowering as though endowed with life. The woods at Hopetown made a splendid background. Before I had time to drink it all in another change had taken place. Here in the middle of the picture was *Queen Mary*, end on, and astern of her the fine one-masted battle-cruiser *Tiger*. Stretching away into the distance lay a double line of the eight battleships of the "King Edward" class, and still higher up the light cruisers appeared in the misty distance. *New Zealand*, like ourselves, swung right athwart the tide, the hands very busy on the forecastle putting on the mooring swivel. The masts of *Australia* could be seen beyond. She also was working her cables. Which of us was first destined to pull down our church pennant and hoist "Evolution completed"? In old days there used to be a race between the different ships.

Besides my work on board *Indefatigable*, I painted from the commander's cabin of *Queen Mary*, and after church on Sunday Captain Prowse took me all over the ship. This inspection was absolutely different from that of a battleship a short time before. In *Dominion* everything was in semi-darkness, the decks were running with water, the men roughly clad as though in battle. On the contrary, in *Queen Mary* all wore their "smarts," the decks were

spotless, and brilliant sunlight was pouring in through every port. Air and brightness shone everywhere. We went from the captain's main cabin right aft to the fore-peak, fragrant with the scent of new hemp. The men stood to attention as we appeared, but it was quite evident that not a man amongst them expected any sort of reprimand; theirs was a happy ship. We went all along the lofty 'tween-decks, and one of the last places visited was the sick-bay. Notwithstanding its spacious accommodation, there were but two inmates. I asked what their trouble was, for they looked as merry as sandboys. One had his shoulder put out, and the other had been kicked on the shin on the football ground.

I find it very hard to conclude this chapter telling of my delightful sojourn with the fleet in 1915. During my short cruise I made many good friends. I little thought as I went ashore that I should never see any of them again. Both *Queen Mary* and *Indefatigable* formed part of Sir David Beatty's squadron which bore the brunt of the fighting in the great inconclusive battle off Jutland. In both ships the German salvos, falling steeply, pierced the flimsy armoured decks or, perhaps bursting in the turrets, sent flames down the ammunition hoists and exploded the magazines.

One may fancy a post captain to be a rather grim and awful personage to his officers and men, and indeed the traditions of the Service are such that at sea there must always be a sort of barrier between the supreme head and those below him. Both Prowse and Sowerby commanded "happy" ships, and in each case I remarked that the barrier between captain and officer was of the slightest. Both were blessed with splendid commanders. It was obvious that the whole work of the ship was carried out spontaneously for the good of the Service and not because of Navy Acts. When the two captains met on our return from Scapa they barged at each other like a couple of schoolboys, each trying to shoulder his friend out of the way. Not a trace of impending doom hung over either of them. Looking back, I can only remember lightheartedness and

good humour. The types of the officers and men were of the real old Navy; each knew his duty well, and did it with all his might.

I wish I knew how to sketch life-like portraits of some of those steadfast souls I met in *Indefatigable*. Among them a splendid little cadet, quite a child, but wise beyond his years. He was in charge of all the charts, and was very anxious to help me in my wanderings about the ship. I asked him about his boat-sailing at Dartmouth and of the black cutters which I had often seen handled by the irresponsible cadets in such wild fashion, but he had been too young to sail and had belonged to a term before. The war had come, and he and all his class-mates had been allotted to the different ships. It seemed wrong to send such a boy where he might be in the middle of carnage, with the awful sights of modern war all about him. In the meantime here he was doing his duty with the best.

The captain's servant had at the outbreak of war joined a Highland regiment in Edinburgh—the "Dandy Fifth" I think he said they were named. He had been in all the dreadful fighting round Ypres and the hotly contested Hooge salient. We talked of Sanctuary and Zouave Woods, of Zillebeke and the White Château, of "Hell-fire Corner" and the Menin Road. He had lost nearly all his chums, for the "Kilties" had been in the thick of the fighting, and at last he himself was hit, his forearm being so smashed that he had to be invalided out of the Army. What strange fate drove him to take service in a battle-cruiser, where he would see yet more terrific fighting and meet with disaster, complete and overwhelming? His was a soft and gentle nature, too, delighting in neatness and order. He with nearly a thousand of his shipmates gave his life that Right and Justice should prevail over brute force and lust of conquest. Never forget those who by the great sacrifice made our final victory so complete and overwhelming.

CHAPTER VI

STRANGE CRAFT, NEW DEVICES, AND THE BLOCKADE

AT a period of the war when we were thoroughly at grips with Germany the Admiralty placed orders in the United States for five hundred fast motor-launches. The design was on the lines of a craft which had made a trip from New York to Bermuda. The choice proved a bad one, for it must be confessed that the "M.L.'s," as they were called, were hardly fit for the duties they were meant to perform. To enable them to be driven at sixteen knots weight had been cut down; the tiny rudder was not powerful enough to keep any sort of a course in a following sea, for the long, sharp bow ran deep into the hollows, while the cut-away stern came flying round on the overtaking wave. Any fast craft is trying when rushed at a head sea, the stinging spray and vibration of the engines making for unexpected motion and discomfort. If, on top of this, you find that the craft you are handling is only lightly put together, that the nails fastening the planking to the timbers are only driven blind, and that the stem is nailed on the outside of everything, it hardly gives that confidence expected by a good seaman in the vessel he commands.

The amount of petrol consumed by the engines of the "M.L.'s" proved astounding, and the noise when under way was deafening. As the propeller blades extended well below the keel, they bent up if, by any ill chance, the boat took the ground.

Even their best friends would hardly dare to call these motor-launches handsome, but they had the merits of their defects. First, their light displacement enabled them to live through very heavy

Motor Launches

weather, for they behaved like an empty cask among breaking seas. Secondly, their cabins were wonderfully roomy for such a small craft, and as long as they were not under way or at sea officers and crew were comfortable enough.

To man this fleet amateur yachtsmen and other sporting seafarers, architects, civil engineers, stockbrokers and lawyers, both sea and the shore-going kind, more or less used to the handling of boats, were given temporary commissions in the R.N.V.R., and after a short training at Greenwich and on board *Hermione*, at Southampton, they took charge of their noisy, evil-smelling packets. They might be met all round our coasts in a cloud of steam rushing at top speed, each on his own mission—mine-sweeping, patrolling or attending to larger vessels.

The crews, like the officers, were nearly all amateurs. One boat, for instance, carried a baker, an official booking clerk, a railway greaser and a bargee. Considering the small amount of training and the great variety of work they had to perform, these much-tried men performed duty gallantly. They carried on in fogs and blizzards, among sandbanks or off rocky coasts, but the worst of their time was spent waiting while the "dockyard matey" was putting to rights some trifling defect in the engines. There never seemed to be any spare parts in store, and months were wasted over work which ought to have been finished in a day or two.

Some of the "M.L.'s" were armed with guns, though the platform was never a steady one; others had tall wireless masts or heavy derricks; all carried depth charges and detonators. Often they were told off to attend to some big ship, run messages or do any odd work that came to hand. Hydrophones were also used in them. The following is an account of an interesting day spent in an "M.L." which was going out with submarines in the Channel:

This motor-launch had a torpedo boat with her, and when she had transferred the young submarine officers to their respective craft the torpedo boat hoisted an enormous red flag and steamed off to act

as target. The "M.L." was to watch for the line of bubbles which would show the track of the torpedo, and to follow at full speed, so that the bright red-headed fish should not be lost. The submarine miner *Nettle* also went in chase, though at a much slower pace, and when the spot was pointed out where the torpedo lay drifting like a dead shark she would hook it on her wire and hoist in the deadly instrument of destruction.

There were often long waits between the runs of the submarines, and the motor-launch was more comfortable when both engines were stopped. Whilst she lay broadside on, a convoy came up Channel escorted by destroyers, armed liners and patrol-boats towing balloons. They stretched for a long distance, and many of the ships were painted in fantastic stripes and strange patterns. Seaplanes patrolled overhead, keeping a sharp look-out for any U-boats which might be lying in wait. When the motor-launch was exercising with the submarines, a wireless message came from the tall headland close to her. It was war news—good news. It was hoped it might penetrate to where the prowling U-boats were waiting to sink our merchant ships. It might have shown them that their chance of winning the war was becoming fainter.

Of course, the officers commanding the motor-launches were given all sorts of fancy names by their comrades. One who had joined quite in the early part of the war, and was therefore high up on the list, was known as the "Senior Wangler" because of his great skill in avoiding all unpleasant duty. There were two other officers renowned for the masterly way in which they ran head first at pierheads and other hard and unyielding objects. These were called the "Bing Boys"; one of them afterwards received the D.S.C. for gallant conduct on St. George's Day at Zeebrugge.

A motor-launch was once lifted out of water by a crane and placed upon the quay. While she was there an enthusiastic gentleman came and planned a wonderful colour scheme which should make the little craft quite invisible to the enemy. There were cubes of scarlet,

Escorting a Convoy up Channel

bright yellow and royal blue, with emerald green, purple, orange and every tint that can be mixed. When the dockyard painters had carried out the whole of the work the effect was certainly wonderful. The port side fairly made you blink, but when you caught a glimpse of the starboard broadside, which was a startling combination of dark blue parallelograms shading into turquoise and white triangles, you wondered if something really serious had happened to your eyesight.

When the motor-launch was once more afloat and went at top speed down Portsmouth harbour she created a sensation, but though some of the remarks suggested admiration, a little irony or even derision bubbled up at times. At Southampton a burly stoker was heard calling down the engine-room hatch: "Bill, 'ere, come up, quick! Here's a b——y rainbow comin' alongside."

No one who has watched that "M.L." in all lights and shades and up against all sorts of backgrounds can honestly say that she ever became invisible.

Though camouflage has sprung into prominence during the war, it had been practised for very many years. Some of us, now old men, can remember the chequers we saw painted on Spit and Gilkicker forts when we were boys; the guns and gun shields on the Hot Walls were daubed over with triangles and squares of red, green and yellow, now a long time ago. Even the wag who painted the name of the racehorse "Pretty Polly" on the railings of Southsea Castle so that it might be read by passing boats, while it was quite unrecognisable to those on shore, showed that he was worthy to be ranked as a camouflage artist even in those distant days. The first attempt at camouflage in the great war was a huge white wave painted on the bows of fast ships to give an appearance of speed. The idea was that the unsuspecting U-boat might suppose that her prey was steaming twenty-five knots when it was only going twelve. A Clyde "puffer" (one of those short, little double-ended steamboats, almost as broad as she is long) was tender to a fast cruiser on which was painted a

white bow wave indicating a speed of quite thirty knots. The tubby tender must needs paint a bow wave upon her own bluff nose though no one would dare to credit her with more than six knots.

Early in the war there came an Admiralty order that all warships should brace up their yards when at sea to prevent the German submarine commanders from estimating their course. As no two ships braced their yards quite the same, the effect of the order was to give the squadrons rather an untidy and forlorn appearance, though the idea was no doubt sound from the camouflage artist point of view.

After the motor-launch a new type of small fast craft made its appearance. It was a Thornycroft design called "Coastal Motor Boat," soon shortened into C.M.B. When driven at close on 40 knots the whole of the fore part of the little ship rose high out of the water, and the afterbody, mostly hidden in spray, rode upon a single wave. The beautifully fine lines were broken by a single step almost amidships, and this step allowed air to reach under the centre of the boat just where a vacuum might be formed by the tremendous speed at which she was driven.

The torpedo, the only weapon of the C.M.B., was carried in a sort of trough aft and dropped stern first, rushing on after the motor-launch, which, of course, steered clear of the deadly "fish" without delay.

The officers and crew, all young unmarried men, were accommodated in quarters ashore, only going out for short bursts and coming back to comparative comfort when the strenuous runs were over.

In the hands of brave men the coastal motor-boats carried out night operations with a success which was truly wonderful. The deeds of our young sailors at Ostend, Zeebrugge and Cronstadt prove what a tremendous amount of destruction can be wrought on enemy shipping in a brief moment.

As a complete contrast to the fastest craft in the Service we give a picture of the slowest. H.M.S. X222 was originally built for land-

Battleships, Light Cruisers and C.M.B.s

X 222. A Mystery Ship

ing troops and stores in Northern Germany. She drew very little water and was driven by twin motors burning shale oil, a very economical means of moving the odd-looking craft at six knots an hour. She was one of Lord Fisher's 612 new creations.

Her captain had been in the White Star Line, but during the Boer War he deserted the sea and joined the Midland Mounted Rifles, a mixed crowd of beachcombers, University men and ne'er-do-wells engaged in deadly fighting with the Boers under Kritsinger and Lotta. When the Great War broke out he left his horse ranch in Canada and joined a submarine at Vancouver protecting Victoria and Juan de Fuca Strait. After the German flag had been wiped out in the Pacific he gravitated to the Dover Patrol, where Admiral Bacon, who had been fitting out X222 as a fighting ship by arming her with two 12-pounder guns, gave him the command. One of the authors went for a cruiser up-channel in this strange vessel, and the motley crew, after throwing the Dan buoy overboard as a mark, let fall the screens concealing the guns and went to target practice. By an artful arrangement of the ensign-halyards the merchant flag came down as the white ensign went up.

The happy hunting-ground of this motor-lighter was off the bar harbours of Étaples, St. Valery sur Somme and Tréport, so the German submarines infesting the south side of the Channel were given no rest. Another duty often carried out was the protection of the transports running every night between Newhaven, Dieppe and Havre. As X222 had not enough speed to keep up, she was towed by one of the larger ships, and her great bollards forward and light displacement made her very suitable for this work. Bad weather had no terrors for the gallant captain and his merchant crew. They knew their quaint craft would thrash through any sea or bump over the most treacherous sandbank. Two mascots lived on board—a puppy and a rabbit. The strangely assorted pair romped and gambolled all over the deck.

Passing from strange adaptations to defeat the U-boats by com-

bat, we may go on to craft specially constructed crooked for their own protection.

Here is a drawing of two standard ships built to confuse the submarine commander. The reader will notice that they are so painted as to make it very hard to guess whether they are steaming towards you or away. Neither masts nor funnels are in the middle line; the derricks are placed diagonally and are of unequal height, so that you can hardly say what course the quaint ships are steering, and the mystery is made still deeper by the rigging being "boss eyed," the wireless and signal-yard being braced up, and "a-cock-bill." The drawing was made from actual ships. It is *not* a fancy picture. The little projection on the stem head is the paravane shoe, which is lowered to the forefoot when the ships reach waters where mines may be apprehended. Old Father Neptune has borne many strange craft upon his strong back, but never anything quite so lopsided as these.

To pass from motor-boats, C.M.B.'s, "Q" boats and standard ships to the direct doings of submarines, many adventures could be collected. Here, for instance, is the story of a cruise in the North Sea which resulted in a quite unexpected meeting in the depths.

E 50 set out from Harwich on a fine June morning. Mine-sweepers steamed ahead and cleared a track because German submarines were in the habit of "laying eggs" in the fairway. E 50 steered for the North Hinder, where she was to patrol for ten days—on the surface at night and submerged during the day. On the first day out she was engaged in diving to eighty feet and coming up every quarter of an hour to have a look through the periscope. In the afternoon, just as the submarine was rising for the last time, those on board felt a most tremendous bump. The bow of E 50 was thrown up, and she listed over ten degrees. The skipper rushed to the periscope, for the craft was quite near the surface, and as he swung it round to starboard he saw a German right alongside of him. The two craft were held together by the British hydroplane

Standard Ships

being jammed into some of the German's gear. Promptly the skipper gave the order "Take her down," and every tank was flooded at once. Then he called "Full speed ahead!" There was plenty of negative buoyancy, but E 50 would not sink. It was supposed that her enemy was all this time trying to rise. Was there ever such a strange tussle?

Eventually the two broke suddenly apart, and down went the British boat like a stone. After sinking one hundred and eighty feet the crew succeeded in checking her and got her more or less trimmed, though the foremost plane still worked stiffly. The torpedo tubes were made ready, and once more E 50 rose to periscope depth to try for the first shot.

Away on the port quarter the German was lying with a big list. It was impossible to read his number, for it was hidden by the round of his bilge hove high out of the water.

The captain of the U-boat must have seen the periscope of E 50, for he in turn dived in a hurry in spite of his uncomfortable list; there was no time to fire the British torpedoes, and the enemy was never seen again, though our submarine hung about the scene of her strange adventure until dark.

When once more in harbour it was found that E 50's port hydroplane had been sheered off flush with the hull; no doubt it had snapped when the two submarines had been pulling off their tug-of-war in the depths of the North Sea.

UC 5, another submarine, was caught by a very simple trap. The German went in to lay her mines in the fairway, as she no doubt had often done before, but the buoys had been shifted cunningly; so that instead of running up the Channel the unfortunate marauder stuck upon a sandbank, where the waiting patrol soon captured all hands. When the tide flowed the mine-layer was brought in triumphantly.

The Hun was not the only player in this game. We also laid a mine-field sixty to seventy feet below the surface in the track

where the U-boats might be expected to lurk. Of course, it was quite safe for ordinary ships to pass over. It is hard to say what damage was done to our enemies by this device.

We give here some pictures of the ships which came into being partly in consequence of the lessons taught by the engagements of the early part of the war, and partly to carry out a great scheme which Lord Fisher had in mind for the invasion of Germany. *Renown* and *Repulse*, two slightly modified ships of the "Royal Sovereign" class, were already on the stocks when war broke out, but the battle in the Bight changed old ideas, and before Christmas, 1914, Lord Fisher gave orders that the design of the two battleships was to be changed entirely. Speed was now all important, so instead of 23 knots the new ships were to steam 32. To attain this result their length was increased from 580 to 750 feet; the number of heavy guns was reduced from eight to six; the thickness of the armoured belt was cut down from 13—6- to 6—3-inches, and its width was at the same time whittled away to a narrow strip along the waterline amidships, leaving the tapering ends unprotected except for a two-inch deck.

Next to high speed came the necessity for light draught, so depth was reduced from 28½ to 25½. The Admiralty designers went to work and produced drawings for two tremendous battle-cruisers, bulged out amidships to protect them against torpedo attack.

Lord Fisher insisted that his new creations were to be finished in fifteen months, so the contractors set to work to take to pieces the skeletons of the battleships with all speed. Messrs. Palmer had no slip long enough, so the order for *Repulse* went to Messrs. John Brown. The material delivered was used as far as was possible for the new ships at Fairfield and Clydebank. On January 25 the keels were laid, and nineteen months afterwards *Repulse* joined the flag of Sir John Jellicoe at Scapa, *Renown* following about a month later. This was a wonderful record for both designers and builders, but his lordship was not content with his offsprings—he

Renown

wanted a much more extreme type. There must still be the same speed and the same sized gun, but the draught was again to be reduced, for the new ships were to cover a surprise landing on the Baltic coast of Germany. The Admiralty designers, therefore, received orders to plan two super-light cruisers, *Courageous* and *Glorious*. As they were to draw not more than 22 feet, it was evident that weight must be still whittled away, so the armoured belt was reduced to three inches and the number of 15-inch guns cut down to four. The greatest secrecy was observed with regard to these vessels. They were spoken of in whispers and called the "hush ships." *Furious*, ordered after the others, was armed with two 18-inch guns. It is said that the blast alone of these enormous weapons blew her picket-boat in half when they were fired. Other mishaps followed; *Courageous* was driven fast against a head sea and her forecastle deck buckled into great corrugations, after which she and her sisters went in to be strengthened considerably. There can be no doubt that these ships were freaks; the workmen at the shipyards called them "Outrageous," "Uproarious" and "Spurious," and when the exaggerated flare of the bow and the long straight side is seen foreshortened there is no need to ask why such nicknames have been bestowed upon them. They were the first of Lord Fisher's 612 new ships.

When *Dreadnought* first appeared she was looked upon as a very long vessel, but these "hush ships" are half as long again as the old *Dreadnought;* they can steam over 32 knots and navigate waters where no heavy enemy could follow. In the picture opposite page 102 *Furious*, which had been converted into a seaplane carrier and painted all over with great triangles and zigzags of blue, black and pale green, is seen riding out a gale in the Forth; beyond her is *Courageous* with some of the battle-cruisers in the mist.

Apart from regular reports, all sorts of yarns were spread about concerning the U-boats' work, some of them more highly coloured than others and some more or less true.

One story worth repeating, as it is typical of war-time romance, came from a seaman in a collier who said he had been sunk in St. George's Channel, and that the German submarine fired four shots at him from only a ship's length away but missed him each time. From 9 a.m. to 3 p.m. the submarine got six colliers and a fishing boat. During the night it was found that signalling was going on from a lighthouse, and the men of a patrol boat landed, shot the lighthouse keeper and then signalled all clear to the submarine, which came in and was sunk!

Another story, a true though not an adventurous one this time. An R.N.R. officer was very keen on every man doing his duty to the utmost. One day during church it was noticed that at one part of the service he was very restless. At last he got up from his knees and moved to where an absent-minded bluejacket—who clearly was not joining in the responses as he should—was kneeling and hissed into his ear: "Pray! Damn you!"

As a matter of genuine interest the invention of the paravane from the beginning is of great value. The first experiment was with a trawler that was brought alongside *Benbow* and was fitted with mine-catchers which were to be towed from the bow. Next day *Phaeton*, which had been fitted with the same device—Commander Usborne's idea—was taken out and steamed through a mine-field, towing a kite on each side from her forefoot. It is remarkable that onlookers at the time took little interest in the device, evidently considering so new-fangled an idea of little value. Later on Admirals A. C. Leverson and A. L. Duff were put in charge of the experiments, which, though carried out with great energy, did not result in complete success. Lieut. Dennis Burney had also been working at a device for towing explosives in a torpedo-shaped body, which was made to keep away wide on each quarter of the towing vessel by two otter-like fins. Sir John Jellicoe, who was very keen on protecting his battle-ships from mines, discussed the matter with Lieut. Burney, and soon the two devices were being tried in Scapa Flow.

Battle Cruiser *Repulse*

In spite of many disappointments the work was patiently proceeded with. Eventually Commander Usborne's idea was carried out by using Lieut. Burney's torpedo body, which now carried no explosive charge, but was fitted with a wire-cutting knife. Slowly the invention improved, and eventually every ship in the Grand Fleet towed a pair of paravanes. The terror of the German minefield became at once a thing of the past, for the two "P.V.'s," as they were soon called, would deflect the mines off to the right or left without exploding them. There was, of course, the possibility that a ship might strike a mine directly with her forefoot, but in that case the explosion would be so far forward that little damage would be done to the structure of the vessel.

It is interesting to stand on the forecastle of a modern warship and watch the "P.V.'s" being got out as the ship leaves port. The wires to the ship's forefoot are being dragged through the spray, quivering and vibrating with all the energy of twelve knots. Abreast of the fore turret the two paravanes overhang the water, each in a sort of clutch, not unlike the fitting used for dropping torpedoes from boats in the good old days before the war. When the order is given and the clutch springs open the paravane, as it falls with a splash into the spray, seems suddenly to be alive and rushes away through the transparent water to take its appointed station deep down and broad on the bow.

As might be expected, there is tremendous strain on all the gear used for towing the queer-shaped, fish-like invention at such an angle, and everything vibrates with energy. The towing wire, even though it is of the very best, soon becomes crippled with the wear and tear. After dark, when your ship is rushing on its zigzag course across the pathless sea, you may lean over the rail and watch your two protecting angels, all phosphorescent in the inky waters, both quivering and scintillating deep below the flying spray.

On May 4, 1916, combined mining, submarine and aerial operations were carried out near the Little Fisher Bank and Horn Reef.

The seaplanes were to attack the Zeppelin sheds at Tondern. Two mine-fields were laid—the first, south of Vyl Lightship, was the work of *Abdiel*. Her area was in the track of ships passing into the North Sea via Horn Reef. *Princess Margaret* laid her mines where the Germans might run over them if they took the West-Frisian-Islands route.

Three submarines were in waiting off Horn Reef, three near Vyl Lightship and three more close to Terschelling. Destroyers supported the mine-layers, the First Light Cruiser Squadron supported sixteen destroyers, and the Battle-Cruiser Fleet, with its own cruisers, in turn covered these forces, with the Grand Fleet behind them all. The listeners round the British coast had located a Zeppelin near the centre of the North Sea by the intersection of the waves of vibration caused by the airship's engines, but the light cruisers were not at first able to sight the elusive monster.

Only one of the seaplanes succeeded in reaching Tondern. There was a bit of a lop on the North Sea and the other 'planes were unable to rise; after all, the expedition was by no means fruitless.

Two light cruisers, *Galatea* and *Phaeton*, were patrolling to the south when they sighted up against the pale blue sky the silvery-grey envelope of the Zeppelin glistening in the spring sunlight. She was evidently scouting and much too intent on our battle-cruisers away to the westward to pay attention to the light cruisers steaming at full speed towards her, but making no smoke. Perhaps she thought they were only destroyers, for each of them had but a single mast. The range rapidly shortened, and at last the Zeppelin, which did not try to escape, but continued on its course, was only ten thousand yards away. The two cruisers opened fire with their foremost guns, and at the third or fourth round the sausage-shaped body gave a sort of cant upwards. The cruisers only had time to get off seven rounds between them before the airship made off, with the 6-inch shells bursting all round her bright silver shape—a terrible and beautiful spectacle. No one knew that she was hit, but ten minutes after the

Glorious and *Furious* riding out a gale in the Forth

"Cease fire" the Zeppelin suddenly stood on end, then doubled up in the middle, and fell head-first into the sea several miles away. She was then seen to spread out on the water. The two cruisers rushed at full speed to finish the work and pick up survivors, but as they neared the wreck one end began to rise—it looked just like a miniature snowy peak. When the light cruisers drew still nearer the conning tower of a submarine showed above the water, and as warships, as a rule, approach submarines cautiously, even when they may possibly be friends, *Galatea* and *Phaeton* withdrew to a safe distance. As it happened, the stranger proved to be our own E 31. She went alongside the wreckage and rescued seven survivors.

So much for anecdotes of individual adventure.

The armed merchantmen of the "Muckle Fluggar Hussars," to give the ships of the Tenth Cruiser Squadron the nickname bestowed upon them by their many admiring friends in the Royal Navy, were the instruments which finally brought the great German nation completely to its knees. Behind them the Grand Fleet with its might and power rendered their work possible. Their happy hunting ground stretched from Muckle Fluggar, the most northerly of all the British Islands, to the drifting ice pack which fringes the east coast of Greenland.

Theirs was the duty of searching every ship bound to Northern Europe. The blockade of Germany had been entrusted to Rear-Admiral de Chair on August 1, 1914, when he hoisted his flag in the old cruiser *Crescent*. At first he commanded eight old ships as out of date as his flagship itself. They were called "first-class cruisers" when they were built in the last century. Their names were *Grafton*, *Endymion*, *Theseus*, *Edgar*, *Royal Arthur*, *Gibraltar* and *Hawke*. They were fine-looking ships, but quite unsuitable for the duties they had to perform. The stormy seas broke over them, penetrating their weak points; besides, they did not carry enough coal for extended cruises, and had small accommodation for the many officers and men required. *Hawke* was torpedoed, and the rest of

the old ships were gradually replaced by armed liners. "Cruiser Force B" was laid up, and the Tenth Cruiser Squadron finally became a fleet of twenty-four merchantmen.

Here is Admiral Sir David Beatty's description, in a speech at Liverpool, of the work of this unit:

"The creation of this squadron of ships, many of which come from this port, was in itself an achievement of which the city may well be proud. Not only were the ships Liverpool ships, armed and equipped by Liverpool firms, but the crews that manned them were mostly Liverpool men. They became an integral part of His Majesty's Navy and of the Grand Fleet. All this is well known in Liverpool, but what I venture to say is not so well known is that the bond of union which always existed between the two great services —the Royal Navy and the Mercantile Marine—in the great brotherhood of the sea has become closer and more real. We have come to understand each other as we never did before. The magnificent qualities displayed at the services rendered by the officers and crews of the Mercantile Marine have filled every member of the Royal Navy with admiration and pride."

Rear-Admiral de Chair, who when a midshipman was captured by Arabi Pasha at the time of the bombardment of Alexandria, had proved himself a dashing leader of destroyer flotillas. Now he was given the important part of equipping and organising the great liners and converting them into men-o'-war, as the Elizabethan gallants, headed by the glorious name of Sir Richard Grenville, had changed their merchantmen when the Great Armada came.

A great majority of the ships met with were harmless neutrals, but on the other hand it was quite impossible to tell from their appearance which were the armed raiders and which the innocent merchant ships. When a vessel was brought in to be examined by one of the cruisers she was ordered by signal to steer for the armed boarding steamer, the cruiser meanwhile carefully staying outside torpedo range, keeping her guns trained on

One of the armed Merchantmen of the Tenth Cruiser Squadron boarding Neutrals

the stranger to enforce her signals. The orders to the armed boarding steamer were definite enough. Having lowered her boat, she was to steam away as fast as possible. In the innocent-looking tramp with the Norwegian colours painted conspicuously on her side, a lever might at any moment be turned which would drop the painted flap and disclose a battery of Krupp guns; on the other hand, torpedoes might be fired before the boarding steamer had time even to fire her first shot. Naturally enough, after a long spell of boarding the men engaged in this arduous work became callous and sometimes took risks which were considerable. If the innocent stranger showed a tendency to bring her broadside to bear, it might be well for the boarding steamer to have all ready for a salvo. On one occasion the pulling of the lever and the dropping of the painted screen was the signal for a rain of shell from the British ship, and this knock-down blow, quite at the beginning of the action, contributed not a little to the final destruction of the enemy raider.

The cruises of *Hilary* may be taken as a sample of the work performed by the Muckle Fluggar Hussars. She had been a Booth liner before the war, trading to the Amazon, and when fitted out as a fighting-ship carried six 6-inch and two 6-pounder guns.

The ship sailed from Liverpool to join the Tenth Cruiser Squadron on December 15, 1914, and started on patrol between Sule Skerry, west of the Orkneys, and the southern point of the Faroe Islands, rather more than one hundred and fifty miles. Submarines were as yet unheard of in these waters, so the patrol was carried out at eight knots in daylight and six at night. On the fourth day a neutral was boarded, and an armed guard took the stranger to Kirkwall. On Christmas Day a gale arose, and a man was washed overboard from the after gun platform. This was the beginning of trouble. The gale continued, and on the 26th a barque in distress was sighted. *Hilary* stood by her all night, and when daylight came a six-inch wire was passed to the barque, an officer and a signalman going on board to keep up communication. On New Year's Eve

the weather became worse, and at midnight the barque signalled that she had ten feet of water in her hold. The tow line was slipped, and the crew of the sinking ship all crowded into one small lifeboat, waving their arms and shouting until they capsized. *Hilary* was brought to windward of the struggling crew, who succeeded in righting the boat, but very soon afterwards she again capsized. Then a boat was lowered from the liner, and though it was not possible in such a sea to pull to the capsized men, the ship was so handled that she drove down upon them. Two of these unfortunates were crushed between the boat and the ship, which was rolling forty degrees at the time, but at last six out of the crew of nineteen were rescued.

In the meantime the doomed barque had hove her stern into the air with a roar which could be heard above the yells of the crew and the howling of the gale. She sank, sending up a great column of water. The searchlights playing on the struggling, shouting men, and the sinking ship cutting sharp against the inky sky, made a picture never to be forgotten by those who saw it.

On her second trip *Hilary* met a gale of unusual fury which continued for three days and nights. The ship was hove-to all the time in mountainous seas. *Clan MacNaughton*, another armed liner of the Tenth Cruiser Squadron, disappeared with all hands in the same gale, and much wreckage was seen afterwards. When it was at last possible to get a sight of the sun it was found that *Hilary* had drifted during the gale to within a few miles of Iceland. Nearly half of the quadrant in the wheelhouse had been broken away, so the helm could be put over only ten degrees on one side, and the officer of the watch had to keep the ship's head to the wind by using the engine-room telegraph continually.

In spite of the damage to her steering gear *Hilary* could not be spared, for many of the Tenth Cruiser Squadron had met with trouble and had been forced to put into port; she was obliged to carry on as best she might.

By the end of 1915 all the crew had quite settled down to their

Valiant and *Malaya*

monotonous work. Life on board seemed to go on without change. One trip in the stormy North Atlantic was very like another. Then in the early part of 1916 the ship was ordered to a base among the bleak islands of Shetland called Swarbachs Min. This meant that the visit to Glasgow or Liverpool every thirty days was now reduced to a refit every sixty days.

By this time the patrol line had to be placed farther back, where there would be less liability to attack from the ever-increasing U-boats. Besides, as the summer advanced the ships pushed far to the north of Iceland, even up to 67° 30′ North, not so very far from the drifting pack-ice.

All this time the crew was learning how to handle boats in heavy weather, and had many narrow escapes, for the great fishing fleets were busy catching herring, and all had to be boarded in turn.

A Norwegian, which had been built for the fiords and not for the open sea, was taken charge of by a cadet with pluck—a boy from the training ship *Conway*—and an armed guard. They were to take the suspected ship to Lerwick. The little vessel, 100 feet long and 20 feet beam, had a funnel right aft, and a thing like a bridge with a tiny wheelhouse on it and a still smaller cupboard, perhaps intended for a chart-house. In this the *Conway* boy and his armed guard of two men had their meals and slept, when sleep was possible. The ship carried deck cargo of salt herrings and coal.

Iceland was still in sight when the course was set, but thick weather began almost at once and lasted till the evening of the second day. Then a south-westerly wind came on, and the little boat began to make bad weather of it. The guard managed to find two sails, which were set in a lash-up sort of fashion. As the engines would not drive the ship on her proper course, the boy let her head go off until the wind was six points on the starboard bow. The sea got worse and the deck cargo began to wash overboard, which somewhat lightened the little craft. She thrashed slowly towards the coast of Norway. At midnight of the fourth day the wind rose suddenly,

and the bridge seemed to sway like a house of cards about to fall. On the afternoon of the fifth day the weather moderated sufficiently to allow the vessel to be put on the port tack. All this time the skipper and hands, with the exception of the helmsman, sulked below.

The course steered should have brought the fiord tramp (which could not sail without engines going, or steam without sails set) to the Faroe Islands about the seventh day, so course was altered again, towards Muckle Fluggar, and on the ninth night the weather was perfectly clear, with a beautiful moon. Then the fog came on thick, and the *Conway* boy stopped his engines and turned in dead tired. He was awakened in the morning with the news that the coast was two miles off.

The only chart on board was the northern part of the British Islands torn off from the rest. Lerwick was shown by a little red dot denoting a light. At first it was impossible to say what part of the Shetlands the land in sight might be, so the bold young navigator took his ship in closer, and at last identified the spot. The landfall was half-way between Unst and Fetlar, within a couple of miles by dead reckoning of where he should be. There were shoals close to the land, but though nearly aground the little craft was successfully brought to Lerwick in the afternoon and handed over to the authorities. Surely this ten days' trip was a wonderful example of successful dead reckoning!

Some of the ships sent in were dreadfully unseaworthy, and the armed guards had a very unpleasant time; indeed, four of them were lost without leaving any trace.

Two officers started off the east coast of Iceland in two sailing fish-carriers, only one of which possessed a compass. They agreed to sail in company, but in a heavy squall at night the boat which was following suddenly disappeared. Her mast had been carried away, and she drifted for many days before the gale, being at last picked up by a Norwegian destroyer and taken into port.

Another ship sent in to Lerwick was manned by a very mutinous

crew. Though their craft had sprung a leak, they refused to work the pumps unless a course for Norway was steered. The armed guard had all they could do to keep the ship afloat. At last the Faroes hove in sight, and the officer in charge decided to beach his leaky ship, first putting the captain and his mutinous crew in a boat and telling them to find their own way to the shore. Afterwards the stranded ship broke up, and the armed guards were taken to England in a trawler.

Three years of this dangerous and monotonous work told on the crews. It is easy to believe that they longed for a change. Ten of the liners had been lost—*Alcantara*, *Avenger*, *Oceanic*, *Bayano*, *Champagne*, *Clan MacNaughton*, *Hilary*, *India*, *Otway* and *Viknor*. Dreadful stories of U-boats' brutality got about. In one case a captured crew were made to stand on the deck of a German submarine which dived, leaving all the men in the sea. In another the men were simply murdered and then thrown overboard. The ships of the Tenth Cruiser Squadron were often attacked by submarines. *Bayano* had been sunk quite early in the blockade with great loss of life. The German raider *Greif* sank *Alcantara*, and was herself sent to the bottom on February 29, 1916.

Her end was as follows: A report came by wireless from *Andes* that a ship, supposed to be an enemy because of her suspicious movements, was being chased. *Alcantara* joined in, and at last got within six thousand yards of the stranger, which was ordered to stop and asked her name and nationality. A lying answer was returned: "The Norwegian ship *Rena*, from Rio for Trondhjem." The British ship steamed in closer and was hoisting out her boat when the raider suddenly opened fire with four 5.9-inch guns. Down came the Norwegian flag and up flew the German. A desperate battle at once began, and the range was so short that there were many hits and few misses. A torpedo fired by the enemy got *Alcantara* between her boiler rooms; though still fighting, she listed badly, but her guns had set the Hun on fire, and soon after

the Germans were seen taking to their boats. *Andes*, which had kept up a long range fire, now closed in and picked up the boats of *Alcantara*, for the ship had sunk. Two light cruisers, *Comus* and *Blanche*, rushed up at full speed, bringing with them the destroyer *Munster*, and after the men had all been rescued *Comus* steamed away to sink the German, which still flew her colours, though she lay right on her broadside burning fiercely. Nearly a hundred Germans were killed and a great many wounded in this fierce engagement, bravely and creditably fought to a finish by both sides.

The winter of 1916 was the most busy of all. Every ship had now to be boarded. The information sent to the Tenth Cruiser Squadron was marvellously correct; all craft which came their way had already been described, with all sorts of details about the cargo, destination, character of skipper, whether the owners were strictly neutral and so forth. *Maracas* was a German ship sold to an ostensibly German-American firm. She was bound for Germany with a cargo of foodstuffs worth a million pounds. She was caught and sent in, being afterwards declared a prize. *Hilary*, returning to her patrol, sighted two ships feeling their way in the foul ground round Sule Skerry. It was evident that they had some good reason for navigating such dangerous waters, so in a very short time they were boarded and both found to be German vessels which had been sold to a firm financed by a German line, though now sailing under the Stars and Stripes. They were sent in to Kirkwall, where they were soon condemned as prizes, for one carried foodstuffs, and the other rifles and ammunition.

Hilary met her end on a beautiful sunny morning on May 25, 1917. There had been trouble with one of the paravanes, and speed was reduced, when quite without warning a torpedo hit her on the starboard side, putting the three foremost guns out of action and killing a man. It was evident that she was bound to sink in the end, though the water was not rushing in very fast. Both stokehold and engine-room were flooded. Boats were lowered, and the crew

began to abandon the ship, the officers and guns' crews remaining to the last to deal with any attack by artillery should the U-boat break surface. The port after-boat was alongside loading up when a second torpedo hit the ship right underneath, throwing the boat high out of the water and breaking her back. The crew were flung in all directions. Three of them were killed at once and one badly injured. After saving the shaken men, the boats were ordered to shove off and stand by. Then a third torpedo struck home, and as poor *Hilary* began to settle down the captain and remaining officers and men were taken off. An absolute hush seemed to fall on everyone as the ship sank by the stern, her ensign still flying above the turmoil caused by bursting bulkheads and hissing steam.

The nearest land (the Shetlands) was ninety miles away, and the boats were pulled for a few hours in that direction, though a wireless S O S call had been sent out giving the ship's position. A fresh breeze sprang up, and help seemed long in coming. The outlook was black, when, fortunately, at half-past five a drifter bore down upon the castaways and brought them to the coasting base among the islands.

Thus ended the commission of *Hilary*. Like many of her sisters of the "Muckle Fluggar Hussars," she did not survive to see the victorious end of the great war, but she took her share of the long, monotonous blockade which finally brought the most powerful military nation in the world to overwhelming and complete disaster. Her story, which has been told here, is an example of many others.

CHAPTER VII

JUTLAND: SIR DAVID BEATTY'S PART

IN the last week of May, 1916, the Grand Fleet was in an unusual state of excitement. The finals of the Grand Boxing Competition were to be decided on board the sports-ship *Borodino*. Tuesday, the 30th, had been fixed for the great event, and a general order of "Make and mend clothes" (Saturday routine) was issued to enable as many men as possible to attend.

A further holiday was in prospect, for June 1 was Ascension Day, and Admiral Jellicoe made a flag general, that the day would be observed as Sunday throughout the fleet.

Towards the close of the boxing competition there seemed to be a marked tendency to hasten the events, and before the actual finish it was apparent that something unusual was in progress. The men had been brought to the *Borodino* by the attached drifters, but the urgent necessity to get them back to their ships was so great that the sports ship herself got under way, going alongside the super-Dreadnoughts, whilst drifters and picket-boats were busy transferring spectators and competitors alike to their floating homes. The greatest activity occurred in the flagships, and steam was raised in record time, for the rumour went round, "The German Fleet is out at last."

When Drake was told that the Armada was sighted he finished his game of bowls before going out to battle. There was no hurry in those good old days. He knew that the "invincible" fleets of Philip, running before the wind in a great half moon, would take many days to reach the Straits of Dover and might be harassed all the way.

Our modern sailors, on the contrary, were certain that the only way to crush the High Sea Fleet was to rush at highest possible speed to deliver an overwhelming blow. Accordingly, every available ship put to sea at once.

It is hard to say how much the Commander-in-Chief knew of the movements of the enemy, but it is a remarkable fact that in the great Battle of Jutland a German sortie in force exactly coincided with one of our periodical sweeps. We do not know why the German High Sea Fleet put to sea. There may have been political pressure or a feeling in high places that the time had come for the Imperial Navy to show its power. Perhaps the High Sea Fleet went out only to exercise the men. Under the German system the crew did not live on board the battleship, but in barracks ashore. The vessels, all subdivided as they were into small compartments, would not make very comfortable lodgings, but to prevent demoralisation the men had to be kept trained.

At this moment the Crown Prince's Army was making the tremendous attack on Verdun, Fort Douaumont, the Fille Morte and other bloodstained fields. Perhaps the German Fleet was ordered out simply to make a diversion, and thus help the army in Champagne. Whatever the cause, the High Sea Fleet was on the afternoon of May 31 to the westward of Horn Reef. The movement of the British Fleet had been carefully arranged by Sir John Jellicoe and his Staff. Sir Thomas Jerram, in *King George V.*, with the Second Battle Squadron, was ordered to leave his base at Cromarty, and, after carrying out a sweep, was to meet the rest of the Battle Fleet in a position about half-way between Newcastle and the Naze of Norway.

Sir David Beatty, in his flagship *Lion*, with the battle-cruisers *Princess Royal*, *Queen Mary*, *Tiger*, *New Zealand* and *Indefatigable*, was ordered to make his sweep a little farther to the south-eastward of the rendezvous. He had as a support the four splendid battleships of the "Queen Elizabeth" class, under Rear-Admiral Evan Thomas,

in *Barham*, with *Warspite*, *Valiant* and *Malaya*. Sir David was expected to be in position by two in the afternoon of the 31st; his orders were then to steam north until the main Battle Fleet came into sight. He had been told that it would steer towards the Horn Reef, the most westerly point of Jutland. The four battle-cruisers were at two in the afternoon in Lat. 56.46 N., Long. 4.40 E. They were steering north by east in line ahead at a speed of 19½ knots. The light cruiser *Champion* was screening the big ships with the ten destroyers of the Thirteenth Flotilla. Three miles away to the east were *New Zealand* and *Indefatigable*, screened by six destroyers from the Harwich force, and five miles away on *Lion's* port beam were Admiral Evan Thomas's four great battleships in line ahead, protected by a light cruiser, *Fearless*, and nine destroyers.

Another screen, eight miles astern, was composed of light cruisers spread five miles apart, *Southampton* being farthest to the west, flying the broad pennant of Commander Goodenough, and followed in order by *Nottingham*, *Birmingham* and *Dublin*. Then came *Falmouth*, flying the flag of Rear-Admiral T. D. W. Napier, with *Birkenhead* and *Gloucester*. The most easterly of the light cruiser squadrons was that commanded by Commodore E. S. Alexander Sinclair, in *Galatea*, with *Inconstant*, *Cordelia* and *Phaeton*. At 2.20 the Commodore sighted in the far distance two ships; they had a German appearance and seemed to be stationary, as though boarding a neutral. He signalled the news to Sir David, who at once turned his battle-cruisers to the S.S.E., the course for Horn Reef. He meant to place himself between the enemy and their base.

A quarter of an hour after the first message the Commodore sent another. He had sighted a great cloud of smoke. Later he sent yet another report. Strange vessels were steering north. Admiral Beatty altered course to port, and soon after sighted the smoke. He made out five enemy battle-cruisers, screened by destroyers and light craft.

Jutland: *Queen Mary, Princess Royal* and *Lion* begin the Battle

In the meantime Rear-Admiral Napier and Commodore Alexander Sinclair, without waiting for orders, turned to the east and formed a screen between the battle-cruisers and the enemy. There were some German light cruisers in the mist, and these were immediately engaged at long range.

Not wishing to be out of the coming fight, Commodore Goodenough drove his vessels at their utmost speed, and soon took station with his squadron ahead of *Lion*, which had by her change of course dropped *Champion* and her Thirteenth Flotilla. *Engadine* had been a fast excursion steamer running with "trippers" to the Continent in the days before the war. She was now boxed up with a great deck-house aft which sheltered seaplanes. One of these at once went up, piloted by Flight-Lieut. F. S. Rutland, with Assistant-Paymaster G. S. Trewin as observer. The day was most unsuitable for flying, as the clouds hung low (900 feet), and the seaplane was under a heavy fire all the time from light cruisers. Four of the enemy battle-cruisers 3,000 yards away were, however, identified, and Sir David received the message by half-past three, giving evidence of great smartness and efficiency.

By the Admiral's orders his battle-cruisers were formed on a line of bearing. Speed had been increased to 25 knots, and the course, E.S.E., slightly converged on that of the enemy. By this time Admiral Evan Thomas's Fifth Battle Squadron was on *Lion's* port quarter, 10,000 yards away. *Champion*, with the Thirteenth Flotilla, by steaming fast had once more succeeded in taking her old station ahead. By 3.48 the battle-cruisers had shortened the range to 18,500 yards, and a most murderous action began, both sides starting simultaneously. The Germans, as usual, at once picked up the range. *Lion* received two hits only three minutes after the action started. *Tiger* and *Princess Royal* were also hit several times. The enemy bore well abaft *Lion's* beam, and as his shots continued to fall on board our ships' courses were altered to starboard to lengthen the range and confuse the German gunners.

The enemy, however, still kept up a rapid and accurate fire, and in spite of zigzagging his shells rained upon the British battle-cruisers. Amongst several hits *Lion* had the roof of one of her turrets blown right off, with terrible loss of life.

Major Harvey, of the Royal Marines, who was mortally wounded, sent a messenger out of the turret to inform the captain of what had happened, for all communications had broken down. As the man left the turret he heard the major asking if anyone was alive below, at the same time giving orders to flood the magazine. Almost immediately afterwards a second shell landed, killing everyone and causing a fire which burnt out the turret. Without the prompt action of the dying major, to whom a posthumous V.C. was awarded, *Lion* would have shared the fate of *Queen Mary* and *Indefatigable*. The men down in the magazine were drowned when it was flooded—sacrificed to save their messmates and the ship.

It was noticeable that the German salvos generally fell in a cluster, quite close together; they were not strung out as ours were, the result being that the German cluster often fell quite close but harmlessly. Columns of water towered high above the British mastheads, drenching with spray even those in the fire controls. There was another side to the matter when by evil chance a German salvo happened to make a direct hit. In that case a rain of shells, falling with a steep angle of descent, practically wiped out whatever was in its course. *Indefatigable* was the first to be struck by such an overwhelming and irresistible mass of destructive fire. At six minutes past four a cluster of German shells fell upon the port side of the upper deck abreast of the after turret. There was a terrible explosion in the magazine, and the stricken ship passed out of the line well down by the stern. Almost directly afterwards a second salvo fell upon the fore part of the vessel. She turned on her side and sank, leaving only a great towering cloud of brown-grey smoke and steam.

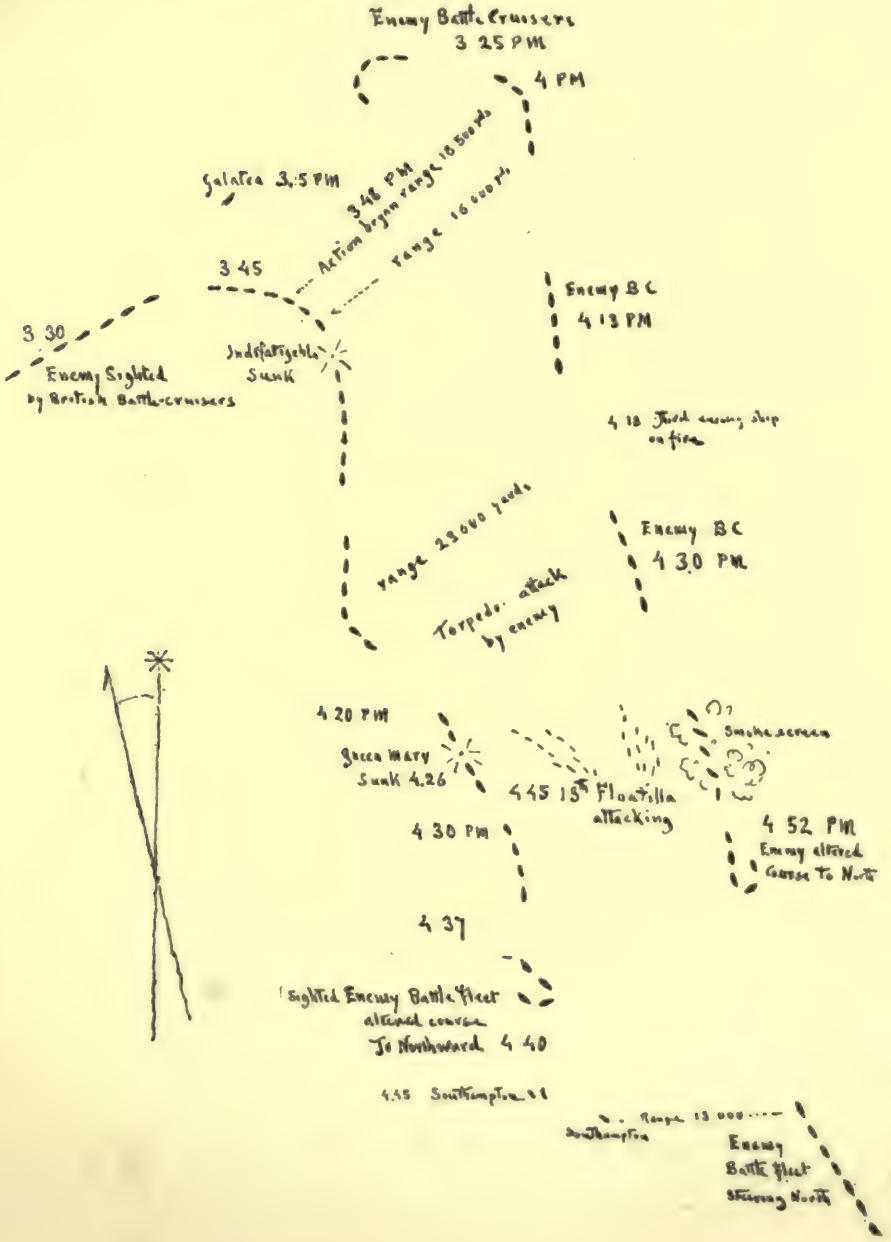
The suddenness of the catastrophe made it awe-inspiring. At

Champion and the Thirteenth Flotilla ahead of the Battle Cruisers

BATTLE-CRUISER ACTION

The run to the South

N B To prevent confusion the track of the 5th Battle Squadron is omitted



one moment the gallant ship was rushing through the waves crowded with hundreds of the best fighting men our breed produces, all in splendid health, full of life and energy. In the next only torn fragments of steel and men remained. The foaming waters rushed in and covered everything, the great grey cloud drifted north and gradually dispersed into filmy vapour. All was over, and *Indefatigable* had gone for ever.

Admiral Evan Thomas's big battleships now began to take their part in the action with 15-inch guns firing when able on the German light cruisers. The range of the enemy from their line was from 19,000 to 20,000 yards, but as the tawny cordite and black smoke from the battle-cruisers and destroyers was drifting it was very hard to see more than two German ships at a time. The opposing battle-cruiser squadrons had now drawn a little apart owing to the zigzags and many alterations of course. There came a slackening in the fire; but a new and deadly weapon was being use, and the tracks of torpedoes could be seen rushing across the line of the British advance. Course was again altered, towards the enemy this time.

Sir David's orders to the destroyers were that they should take any favourable opportunity for an attack with torpedoes, and as there seemed to be some smoke and mist in the east, twelve of the British boats rushed ahead to take up a position of advantage. The German small craft, however, were not behindhand. A light cruiser with fifteen destroyers steamed out, and a spirited little action between the destroyers of both sides was soon in full swing at deadly close quarters. Two of the Germans were sunk, and the rush ahead still continued. Commander Bingham took *Nestor* right at the enemy battle-cruisers. He was followed by *Nomad* and *Nicator*. The shells falling in showers all about them, *Nomad* was so badly damaged that she fell out of line before she got in range, but the others gallantly rushed on and fired their torpedoes at the Germans, who were forced to turn away to avoid destruction. As they

Lion leading the Battle-Cruisers

manœuvred they blazed away with their lighter guns at the dauntless pair. *Nestor* was hit by a German light cruiser and brought to a standstill, while the battle surged onward. Later on, when the greater conflict once more overspread the scene of this opening fight, the German Battle Fleet in passing sank the intrepid and then lonely destroyer leader. She had continued to fire her torpedoes until not one was left. All Britain must rejoice that Commander Bingham, with the survivors of his dauntless crew, was rescued by the Germans, and that the Victoria Cross was afterwards received by the young hero.

Nomad, the first of the destroyers to be disabled, was also sunk when the German Battle Fleet came upon the scene, but a considerable portion of her brave crew was saved and taken to Germany. *Nicator*, the third of the three little destroyers, got safely back out of the conflict in spite of shot and shell. Her captain throughout the engagement was leaning over the front of his bridge smoking a cigarette and whistling the latest popular tunes of the wardroom gramophone. He was giving directions to his coxswain by signs, zigzagging his way in and out and dodging the salvos like a three-quarter on a Rugby field. Both he and the captain of *Nomad* were afterwards awarded the D.S.O. *Petard*, *Nerissa*, *Turbulent* and *Termagant*, getting within 7,000 yards of the enemy, discharged their torpedoes.

The desperate fight between the battle-cruisers was as fierce as ever. By this time many heavy shells, hitting continuously, began to tell their story. The third German ship was in flames, and it was noticed that the enemy's precision and rate of fire were not nearly so good as they had been. To protect themselves the Germans set up a smoke screen, altering course as soon as it had fairly hidden them.

The enemy's salvos were still falling close together, and at this moment one of them crashing upon *Queen Mary* struck her abreast of Q turret. There was another tremendous explosion, and again a

dreadful towering cloud of brown-grey smoke mounted thousands of feet into the air. *Tiger*, which was in station two and a half cables astern, steamed right into the thick of this awful pall. There was no time to alter course. Falling fragments rained upon her decks in the darkness. Captain Pelly has stated that the column stood up solid like a wall. As the pall of smoke drifted northward the stern of *Queen Mary* stood high out of the sea, the propellers still turning and the water round boiling fiercely, for the between decks was a mass of flames. A skylight had been blown open aft, and up the hatch a great wind from below was whirling a column of papers high into the air. At this moment came a second explosion aft, and fragments were thrown in all directions.

A midshipman in an after-turret stated that he felt the tremendous shock, and both the enormous 50-ton guns appeared to stand on end and sink breech-first into the ship. How he got out of the turret seems doubtful, but he found himself standing on the after-funnel, now lying flat upon the deck. Realising that it was a case for swimming, he took off his coat, and was stooping down to unlace his boots when there came a second explosion. He does not remember going up, but only the sensation of falling, falling, falling that is known so well in dreams. It ended in a splash as he arrived in the embrace of the North Sea. Out of all her splendid ship's company but eighteen survivors were picked up by a destroyer.

At the beginning of the action our battle-cruisers were six to five, with 13.5 and 12-inch guns against the 12- and 11-inch guns of the enemy. Now they were but four to five. The thick armour on the German decks and the subdivision of the compartments had proved more effective than had ever been foreseen.

All this time Commodore Goodenough, with his "City" class light cruisers, had been scouting far ahead of Admiral Beatty. At 7.38 he reported that he had sighted the German Battle Fleet in the south-east, and that they were steaming north. Sir David

Southampton in the Battle off Jutland

therefore called in his destroyers, and when he had himself seen the enemy coming up with the wind astern he turned his ships about, signalling to Admiral Evan Thomas to follow. When the German Admiral observed that the British ships were changing their direction he also made a sixteen-point turn, and thus the tide of the battle surged back towards the north-west, where Jellicoe was approaching in support. Meanwhile Commodore Goodenough determined to discover all he could of the disposition and number of the German Battle Fleet. He steamed under a very heavy fire to within 13,000 yards of the heavy ships. The drawing opposite page 120 shows *Southampton* at the moment when a German salvo was falling just clear of his bridge and forecastle. This is no fancy picture. It was enlarged from a tiny photograph taken at the moment, and though in the original the ship is little over half an inch long, one can see quite clearly how close together the German shells fell, and to what a prodigious height the spray was driven.

The Commodore sent off many reports to his Admiral, all the while turning his little squadron now here now there in order to dodge those dreadful columns of spray which fell about him so continuously. Only skilful handling and wonderful luck saved the Second Light Cruiser Squadron from disaster.

Moresby, which had stayed behind to help *Engadine* with her seaplane, now rejoined and made a spirited attack at 6,000 yards, two points before the enemy's beam. The four battleships of the "Queen Elizabeth" class had been from the first hampered by the smoke from so many ships drifting between their line and the enemy. The tremendous shells hurled by their mighty guns might have been expected to wreck the German battle-cruisers if only they could have scored a percentage of hits, but the tawny cordite clouds and the smoke screens all tended to make range-finding difficult and spotting almost impossible. Besides this the ships of Admiral Evan Thomas could not steam so fast as the battle-cruisers and tended to drop astern; the enemy were 20,000 yards away, and it was hard to see

more than two ships at a time. The flagship *Barham* was first hit at 4.23, and about this time punishment was no doubt also inflicted on the enemy. After the sixteen-point turn the Fifth Battle Squadron was able to take a more important part in the offensive, and many hard knocks were given and received.

Sir David's battle-cruisers, still in hot action, were now within an hour's steaming of Jellicoe's fleet, the two leading ships of the Fifth Battle Squadron, *Barham* and *Valiant*, were helping by firing upon the German battle-cruisers, while *Warspite* and *Malaya* were engaging the enemy's main fleet. The light cruiser *Fearless*, with the First Flotilla, was leading the whole fleet, and *Champion*, with the Thirteenth Destroyer Flotilla Squadron, had gone ahead of Admiral Evan Thomas's heavy ships. The First and Third Light Cruiser Squadrons were in position on Sir David's starboard bow, whilst Commodore Goodenough was on his port quarter.

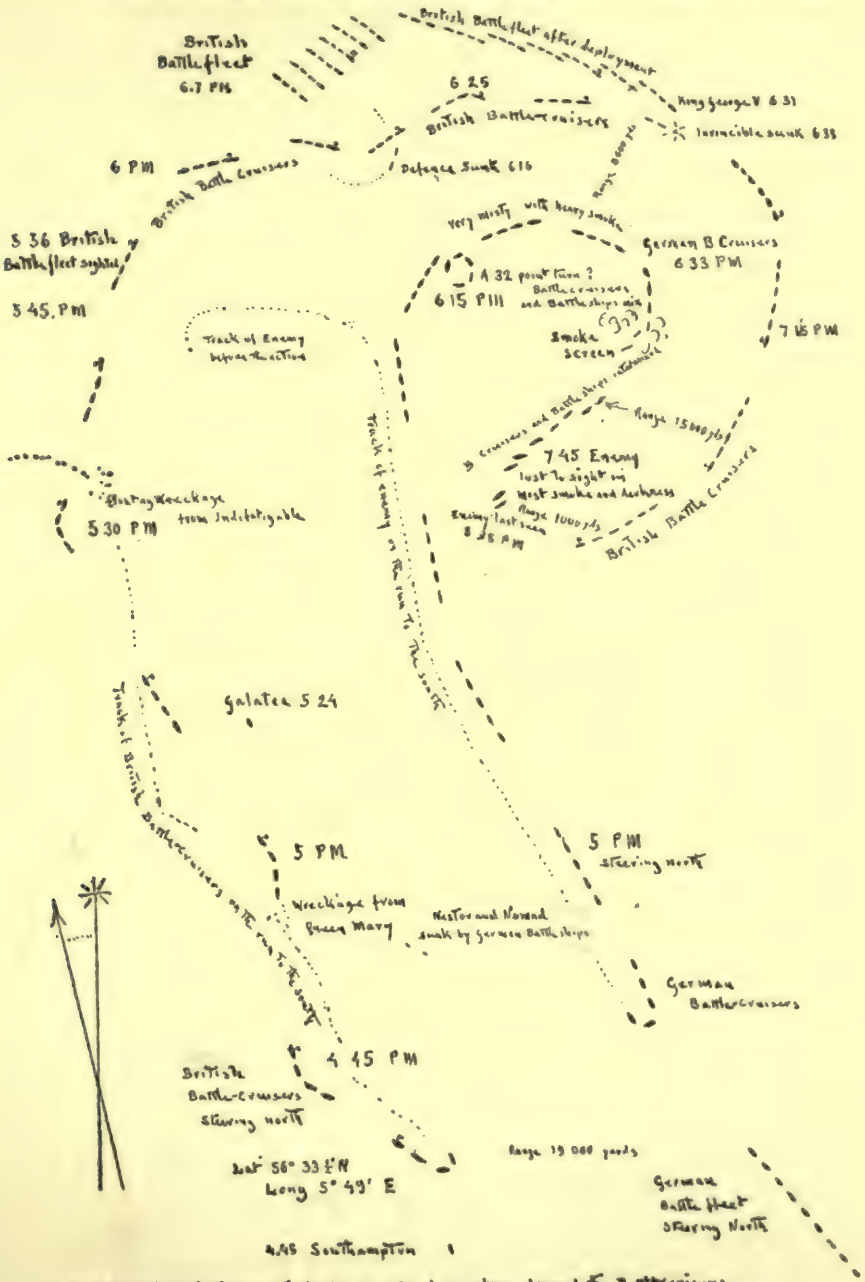
Clouds and smoke became very thick towards the enemy, who was running right before the wind. The mists behind him were variable, at times so dense that while at 14,000 yards the German ships were very indistinct, on the contrary the British showed up dark against the afternoon light. This enabled the German gunners to continue firing, even though the British flagship and her consorts were sometimes obliged to stop owing to the haze.

Lion a little later, owing to a slight improvement in the weather, got off some fifteen salvos, and at the same time her course was gradually altered towards the enemy, changing from N.N.E. to N.E. She was now approaching the Battle Fleet, and it was important that she should conform to the movements ordered by Sir John Jellicoe.

For a moment it is interesting here to break the narrative by giving the personal impressions of a midshipman who was in the fight. In a great sea battle only about a score of either officers or men see anything of the real progress, but if the reader can fancy

BATTLE-CRUISERS IN ACTION

The run To The North, To The East and Southwest



NB To prevent confusion Battlefleets are only shown when clear of the Battlecruisers

himself a midshipman of a turret on board a battle-cruiser he will probably accept the following as a true experience:

You are going down to the gun room about tea-time, when suddenly "Action stations" is sounded, and you rush up just as you are and take your appointed place in your turret close by the ammunition hoists. The two gun crews and the officers tumble up in haste and make ready for battle, clear away and test all gear, though no one at the moment supposes that anything more than the usual practice is in the wind. While waiting for further orders, word is passed that *Galatea* has reported that the enemy is in sight. There will be no crimson target of scene-painter's canvas stretched over wooden trellis, and towed by a tug. This time it is real war! The target will not sail quietly on its way. The target is going to hit savagely back. Half an hour after the bugle sounds you are all hard at work. The great muzzles swing round to the port bow, right and left guns shout their defiance at the foe alternately. A constant flow of ammunition is coming up the hoists, and this is *your* job, your life and death, success or failure—you must give your mind to nothing else. You have neither gas-mask nor Gieve's waistcoat, but you must carry on, and the work must go without a hitch. The noise is incessant, for besides the salvos of the heavy guns the 6-inch battery is bursting out at intervals with rapid fire more trying to the ear than the crash of the great turret armament right under you; the shells are falling all round. If you stop for a moment and look through one of the sights of the control cabinet you catch a glimpse of the ship ahead, all but hidden by the mighty jets of spray which tower far above the mastheads, the intervening water torn and tormented by the shells which have gone wide. Smoke is pouring out of rents in the forecastle. The enemy has got the range at once, and the hits are falling pretty regularly on your ship, a stolid old trainer remarking each time: "There goes another!"—just as though a 12-inch shell striking was quite an ordinary incident. Then one of the hydraulic cylinders suddenly gives out, owing to a fault in the casting—quite a little thing in itself, but sufficient to place the gun out of action, and make the crew, lately so buoyant and cheery, sick at heart. Soon after there is a tremendous crash, which seems as though it had stopped the ship itself—a German shell has hit the armoured barbette a glancing blow, flying forward, cutting cables, twisting stanchions, filling the fore part of the ship with splinters and making a horrible mess. After an hour of hard fighting the conflict is still of a fierce and resolute character, but a little later on your fire begins

Admiral Beatty's Battle Cruisers at Jutland

to tell, and the rapidity of the enemy's shots gradually falls off—the hits, too, are fewer. It is now nearly five o'clock, and you feel that the helm is being put hard over for a sharp turn; your turret swings round and the great guns begin firing on the starboard beam. There is more quick firing, but in the end the enemy's attack dies down again. About an hour afterwards word is passed to the turret that the Battle Fleet is sighted, the firing continues slowly. After a long spell comes twilight. The yelling of the shells grows more and more intermittent as the mist increases, the last being fired about ten. The guns are now practically horizontal, as the range is only two miles. After a further period of waiting some of the crew are allowed to leave the turret to collect food for their comrades. You may go for a moment to the wardroom to try to find something to eat. Working your way aft along the 6-inch batteries in semi-darkness, for the lights are all out, you tumble over mess tables and gear all heaped and smashed. Water is washing about and cordite fumes are everywhere. You are told that the midshipman of Q turret has been killed by a shell striking the roof, that one man was blown right under his gun, that at the same moment the elevating wheel turned and the gun crushed him. There are dead men in the ammunition passages, and shells coming through a warrant officer's cabin have killed a whole party.

You find some of the wardroom officers black and filthy, eating raw onions and biscuit and drinking cocoa, and then you work back through the litter to your turret, with biscuits and a thermos flask. You are dead tired, and try to get some sleep on the top of a shell bin. Distant firing is still going on astern, but you are very weary and the long night slowly wears away uncomfortably.

The grey morning light as it breaks slowly, shows the guns' crews haggard, with drawn faces, and unspeakably dirty. A signal has been received—"Take station astern of Battle Fleet." You are still at action stations and only one or two may steal away to try to get breakfast. The gun-room is in an awful mess; a shell has burst beneath, starting a fire, and the whole place is flooded. School books are floating about in four inches of water, and everything in the way of loose fittings is smashed. The gallery is all right though, and cook has some boiled eggs and tea. He has momentarily reached the height of his popularity. Afterwards, the crews are fallen out and begin to clear up the dreadful chaos and collect souvenirs. Their eagerness for material mementoes sounds coldblooded, but such an instinct inevitably follows a crisis.

It is possible now to see the damage done. Some of the escapes seem

miraculous. One big shell has burst below, and a splinter has stopped right against the main steam-pipe. Another striking abreast of B turret was going straight for A and B magazines. It was stopped by the flour store, and the oil fuel tank. Oil mixed with flour and water makes a nasty mixture, and the bits of bulkheads and the mess from many wrecked cabins stick out of the untidy welter.

After hard work there is a service on the quarter-deck, when bits of men and bodies so mangled as to be unrecognisable are buried, sewn up in canvas. The rest of the dead are lying cold and still, in rows on one side of the deck, hidden behind a screen. War is a dreadful business.

Let us now turn to the forces under Sir John Jellicoe, at this moment doing their utmost to throw their weight into the scale.

Rear-Admiral Hood, who was in command of the famous battle-cruisers *Invincible*, *Inflexible* and *Indomitable*, received orders to reinforce Sir David Beatty. He rushed at full speed in line ahead on a southerly course, screened by the light cruiser *Canterbury* five miles ahead, with the destroyers *Shark*, *Christopher*, *Ophelia* and *Acasta*. *Chester*, another light cruiser, was scouting towards the enemy. The haze seemed very patchy; at one moment ships could be seen at 16,000 yards, at another at only 2,000 yards. The sound of heavy firing could be plainly heard in the sou'-west. *Chester* turned towards the detonations and soon afterwards made out on her starboard bow a three-funnelled light cruiser with one or two destroyers. *Chester* received no reply to her searchlight flashes, and turned towards the west, judging the strangers to be enemies in stronger force than she could judiciously tackle.

As *Chester* neared the strangers she prudently steered towards the north, bringing the enemy craft well abaft her port beam to present a less favourable target for torpedo attacks. The enemy at once opened fire, and at the same time two more light cruisers appeared out of the mist astern. Captain Lawson at once altered course to the north-east and steamed as fast as he could for the protection of the Third Battle-Cruiser Squadron. The fight that followed was terribly unequal. The enemy's fourth salvo put No. 1

Chester in action with three German Light Cruisers

gun on *Chester's* port side out of action, killing or wounding a large proportion of the crews at Nos. 2 and 3 guns. In nineteen minutes thirty-one men had been killed and fifty wounded. The fire control circuits became disabled, and four shells struck close to the water line. It was here that Jack Cornwell, a boy rated first class though but little over sixteen, was mortally wounded early in the action. He stayed at his post with the pads on his ears heroically waiting for orders though all the rest of the gun's crew were killed. A Victoria Cross in appreciation of his courage was given posthumously. The drawing shows the light cruiser in action heavily engaged by the three Germans. She is steaming at full speed in zigzags, trying to confuse the control of the German fire.

Soon after the battle-cruisers came upon the scene, and Rear-Admiral Hood rushed his ships in between *Chester* and her German foes. The enemy did not wait, but, turning away in a hurry, discharged his torpedoes at the advancing British ships. The tracks of five torpedoes were seen shortly afterwards. *Inflexible* turned to port to avoid them, while *Invincible* and *Indomitable* turned to starboard. Three passed too near to be pleasant, and one even ran within twenty yards. In the haze other German light cruisers, with a large force of destroyers, showed up astern of the first three, trying by overwhelming force to push through.

Shark, *Acasta*, *Ophelia* and *Christopher* were the destroyers which formed the submarine screen of the Third Battle-Cruiser Squadron. They had been left when *Invincible* made her turn and now sighted the new enemy. Commander Loftus Jones did not reckon the odds against him. He saw that the light cruisers and destroyers were enemies, and engaged without hesitation. The Germans poured in a devastating fire, and both *Shark* and *Acasta* were very badly damaged. Many of the crew were killed and wounded, and when three more enemies steamed out of the haze and opened fire *Shark's* position appeared desperate. Lieut.-Commander Barron, wishing to tow his unfortunate leader,

brought *Acasta* alongside, but Loftus Jones, who had been wounded, declining to risk another destroyer, ordered *Acasta* away. *Shark* now lay a helpless wreck upon the water, a target for all the German light cruisers and destroyers. The captain was helping to keep the only undamaged gun in action. The last torpedo was being placed in the tube when it was hit by a shell, and a tremendous explosion spread death and destruction far and wide. The action was far too unequal to last, though the gallant officers and men continued to fire their gun. Yet another shell wounded Loftus Jones, taking off his right leg, but he continued to direct the fire. As the enemy came nearer—and it seemed possible that his ship might be captured—he gave orders that she should be sunk. The only gun was still in action, however, and so the order was countermanded, the gallant crew fighting until *Shark* was at last struck by two torpedoes and sank with immortal glory, her colours flying triumphantly to the last. Next morning a Danish merchant steamer picked up six survivors. In view of the splendid defence made, those men were awarded the Distinguished Service Medal. Here are their names: W. C. R. Griffin, petty officer; C. Fillend, stoker petty officer; C. C. Hope, A.B.; C. H. Smith, A.B.; T. O. G. Howell, A.B.; T. W. Swan, stoker. A posthumous Victoria Cross was given to Loftus Jones, their unconquerable commander. All these names will remain indelible on the scroll of England's long fame at sea.

The Third Light Cruiser Squadron, commanded by Rear-Admiral Napier, now made a torpedo attack on the five German battle-cruisers, which still in the mists continued to lead the enemy's line. A heavy explosion under water was felt, and it was thought at the time that one of the torpedoes had struck home.

We left Rear-Admiral Hood dodging the torpedoes of the German light cruisers. Shortly afterwards he sighted *Lion* and the First Battle-Cruiser Squadron. He turned to take his station ahead of Sir David. A very sharp action was at once begun with the

German battle-cruisers at a range of only 8,000 yards. In the middle of the battle Admiral Hood, who was on the bridge with his Flag Captain, hailed his gunnery officer, Dannreuther, in the fire control, saying: "Your firing is very good. Keep at it as quickly as you can; every shot is telling." Only four minutes afterwards a German salvo struck *Invincible* on Q turret. The enemy must have been using delay-action fuses, for the shells burst inside. Commander Dannreuther saw the roof of the turret blown right off. The burning cordite reached the magazine, and a tremendous explosion rent the unfortunate ship in half. Officers who were present say that in the great brown-grey cloud of smoke they saw a picket-boat flung hundreds of feet into the air with quantities of other wreckage. The whole of the midship portion of *Invincible* was blown away, but for a long time afterwards her two ends stuck out of the sea like half-tide rocks, grim and awful in their separation. Many who saw them did not understand at first what they were; an officer in *Benbow*, who passed the wreck at 6.56, said he thought it might be a Zeppelin. Later he saw the red paint and black topping, with a yard-arm group over the stern, then, terrible to relate, the name *Invincible*. A destroyer was standing by picking up men still afloat, and a large quantity of wreckage drifted on the off-side. Commander Dannreuther, another officer and four seamen were saved by *Badger*.

Rear-Admiral the Hon. Horace Hood ranked as one of the most promising of the younger flag officers. He had greatly distinguished himself on the Belgian coast in the early part of the war, and his death was a great loss to the Royal Navy. His memory remains honoured and untarnished.

Inflexible now led the line, and as soon as the wreck had been passed she altered course two points towards the enemy, again lost in the mist. Later on there was a still further turn, but at 6.50 Sir David signalled to the two battle-cruisers to take station astern of *New Zealand*.

At five o'clock Admiral Jellicoe's advanced cruiser line, which was commanded by Rear-Admiral Heath, was about sixteen miles ahead of the main Battle Fleet, and, owing to the haze, the cruisers on the western flank had closed in. Admiral Hood's battle-cruisers should have been at this time about sixteen miles east of the advanced cruiser line, but the course of the "Invincibles" was more to the southward, and they were running quite five knots faster. The result was that, when the sound of firing reached Admiral Heath's ships, he saw three battle-cruisers steaming to the westward. Just as he was about to open fire on the British ships *Invincible* providentially returned his challenge. The battle-cruisers had rushed in between the advanced line and the enemy.

Let us now turn to Rear-Admiral Sir Robert Arbuthnot, commanding four armoured cruisers. His flagship, *Defence*, to the eastward, was followed by *Warrior*. *Duke of Edinburgh* and *Black Prince* formed another line to starboard; both columns steered to the south-east. At 3.47 Sir Robert sighted on his starboard bow three or four German light cruisers. Turning three points to port, he brought them abeam. Both the British cruisers fired three salvos at the nearest enemy, a three-funnelled cruiser, but all the shots fell short. Then Sir Robert altered course to port, bringing the foe ahead. The German vessel was soon much nearer, and the cruisers, half hidden in mist, turned and opened fire, the shots falling all about the British ships. *Lion* and the First Battle-Cruiser Squadron appeared to starboard, still engaged with the enemy they had been fighting all the afternoon, steaming at high speed and showing clearly by their battered condition what an ordeal they had gone through. *Lion's* middle turret had the roof off; fires were burning forward in the port battery and the funnels were badly riddled, but Sir David had kept to his bridge all through the action.

On board *Princess Royal* a heavy shell had struck the after barbette, causing the guns to drop their muzzles forlornly on the deck. Great columns of tawny smoke continued to belch from the long

Defence and *Warrior* in Action

muzzles of the other guns with the brilliant, ruddy cordite flames at each salvo.

Sir Robert took his two cruisers right across the bows of *Lion*, so close, indeed, that Captain Chatfield starboarded his helm to clear *Warrior*.

The positions of the ships are illustrated on p. 141 as they appeared a few moments afterwards. *Defence* and *Warrior* were now under fire from the German battle-cruisers beyond the mist. Both Sir Robert's ships were punishing the tiny *Wiesbaden*—now in great distress, listing over and badly down by the head, but gallantly firing a solitary gun. Shortly after six the enemy obtained a clear view of the British ships, sharply defined against the evening light. *Defence* was hit by two salvos fired in quick succession. The effect was instantaneous. Her magazine exploded with tremendous violence. There were no survivors. Fire seemed to run along from the explosion in each end of the ship and to meet in the middle. In a moment she simply disappeared.

Warrior, in following, had received the concentrated fire of the enemy; great 12-inch shells rained upon her without cessation.

Her Engineer-Commander afterwards gave a graphic description of the scene below. All through her commission he had been gradually working the engines up to do better and better. On the morning of the battle he succeeded in making them run more smoothly than they had ever done before. Never had the old ship been driven so fast. Then came the German shells, smashing and rending everything. The Engineer-Commander's feelings were of rage and fury. His splendid charges, on which he had lavished so much loving care, lay fractured and mutilated by flying fragments of steel. It was unthinkable.

At this moment a heavy shell came hurtling through the port engine-room grating. It passed through the fore and aft bulkhead into the starboard engine-room, and then, without bursting, through the ship's side out into the sea.

The catastrophe was overwhelming. In a moment the starboard engine-room was full of cold, green water which spouted through the shell hole in the fore and aft bulkhead, rapidly filling up the port engine-room. "Shall I stop the engines, sir?" cried a leading stoker. "No, no! Leave them running!" came the answer. The Engineer-Commander was grasped by the collar, and a burly stoker helped him on to the cylinder cover, where, with the water up to his neck, he could hold on to the engine-room grating. On the deck above a savage fire raged among offices and cabins. Bright flames were licking the paintwork; smoke hung everywhere. The stokers helped each other along to the shell-hole in the grating, through which they painfully climbed, choked and half blinded by the fumes. Water washed about the deck; the dead lay huddled in the corners. It is better to draw a veil over what happened to the unfortunate men in the starboard engine-room, caged between fire and water. War is a ghastly tragedy, though it calls forth the heroism of men.

Warrior, crippled and confused, turned away westward; though a perfect wreck, her engines were still running. She soon found herself close to Sir Evan Thomas's four battleships, which had just been ordered to take station astern of *Agincourt*. The ships of the Fifth Battle Squadron put their helms a-starboard to carry out the order, but they were still under a heavy fire, and for some reason or other the steering gear of *Warspite*, the last but one in the line, jammed, and she continued under starboard helm, turning circles in the middle of the battle. The Germans sent many salvos at her, and fires were started and great damage done, water pouring into her after compartments. The picture opposite shows the position of the two ships, *Warrior* crawling out of action and *Warspite* perforce still waltzing in the midst of the shell splashes. *Warrior* was no doubt lucky in meeting *Warspite*, for the great battleship attracted to herself the attention of the German gunners. There is, of course, no truth in the stories which appeared in the newspapers at the time

Jutland : *Warspite* and *Warrior*

claiming that *Warspite* went out of her way to protect the wounded *Warrior*.

Continuing to creep towards the west, the battered armoured cruiser was sighted by the seaplane carrier *Engadine*. The latter was soon alongside getting wire hawsers ready for towing. All through the night the gallant little excursion boat continued to tow *Warrior* towards a British port. On the morning of June 1 the pair had reached Lat. 57.18 North, Long. 3.54 E., but now bad weather began. *Warrior* put her quarter into the waves with every roll and wallowed in a way which suggested that she might turn on her side at any moment. There is a very marked peculiarity in the lurch of a waterlogged ship which is disconcerting. A council was held, and it was decided to abandon the ship. Luckily, *Engadine* was fitted with very strong rubbing strakes—a relic of the days when she carried trippers. In spite of the rising swell, she was skilfully brought alongside by Lieut.-Commander C. J. Robinson, and the large number of wounded men were gradually transferred. Unfortunately one of the cases—a seaman who had both legs amputated—was dropped into the sea between the two ships. Without waiting a moment, one of *Engadine's* pilots—Rutland—jumped in at tremendous risk and rescued the poor soul.

There can be no doubt that the abandoned *Warrior* must have sunk during the night. Many ships were sent to search for her but found no trace.

An officer of the First Battle-Cruiser Squadron has stated that *Engadine*, in spite of her unsightly hangar aft, was most efficient and always at hand when wanted. When orders came for Beatty's vessels to leave Rosyth before the battle the ship was lying with her two cables twisted in a hopeless muddle, for mooring swivels are not supplied to seaplane carriers. One officer at least looked at the tangle of chains as he passed, thinking to himself: "Well, we won't see *Engadine* for some time anyhow." But when the squadron was outside Blackrock Gate there was the ex-tripper in her appointed

place ready for anything. It has been recorded how smartly her seaplane got away before the battle and how quickly the report came in.

Briefly, with all its records of pluck and dash, this terrible chapter draws to an end. The tale has been one of determination and grit, of unexampled disaster and wholesale death. The broad facts stand out clearly. Six of our British cruisers and four battleships of our most powerful type engaged five German battle-cruisers at long range for two hours. The weight of metal was all on our side. The battle-cruisers carried 13.5- and 12-inch guns and the Fifth Battle Squadron 15-inch guns. The Germans were armed with 11- and 12-inch guns only. They were hammered for an hour on the run south, and during that time they sank two of our splendid battle-cruisers. The five Germans were still afloat and full of fight when the German Battle Fleet appeared in support. On the run north the combat still raged. Five battle-cruisers were leading the German line and taking all the hard knocks, though the flagship *Lützow* was so much damaged that the Admiral was obliged to transfer his flag, while *Seydlitz* was in little better state. Then two more of our ships, armoured cruisers of older pattern, rushed to attack. One was sunk at once with all hands and the other so mauled that she had to be abandoned. When three more British battle-cruisers made an attack from the north, the foe turned to the east and sank one of them. No doubt the German Battle Fleet helped considerably during the latter part of the fighting, but when the rival Battle Fleets at last got into distant touch with each other three at least of the five German battle-cruisers which began the action with so much spirit were still in fighting trim, though severely knocked about. Their shooting was wild. We have at present no means of knowing what was the state of *moral* on board. It was suggested at the time of the armistice that the hammering the Germans received off Jutland was enough to prevent the seamen ever wishing to fight again. It is safer, however, not to assume too much. What we do know is that

the German range-finding was excellent at the start; that the German armour was stout enough to burst our shells outside and not inside the ships, and that the speed of the battle-cruisers was higher than had been expected. Our ships, though faster and more heavily armed, were not sufficiently protected by horizontal armour; besides this, when a turret was hit the flames spread down the ammunition hoists to the magazines.

The picture opposite shows the battle-cruiser line at the position called afterwards by our sailors "Windy Corner." The German van was making a gradual turn towards the east. In the forefront of the battle is *Tiger*, blazing away at the High Sea Fleet with all her guns. Ahead of her is *Princess Royal*, and beyond again *Lion*. *Defence* and *Warrior* are crossing ahead of the battle-cruisers, and the destroyer *Onslow* is seen on the extreme right starting off to make her gallant attack on the little light cruiser which was called by the men of our navy "The mad dog"! Her German name was supposed to be *Wiesbaden*, though there seems to be some doubt on this matter. Some suppose there were two light cruisers fired on by many ships. Be that as it may, *Onslow* sighted a light cruiser on the starboard bow of *Lion* in a favourable position for a torpedo attack. The British destroyer, without counting the odds, steamed right at the German and engaged with gunfire, at first at 4,000 and later at 2,000 yards. *Onslow* was badly damaged, but she got near enough to attack with torpedoes; then the destroyer was hit by a big shell. Lieut.-Commander Turvey, D.S.O., fired all his remaining torpedoes, one at the light cruiser and the rest at the advancing German battleships. By this time the brave little ship's engines were out of action, so another destroyer, *Defender*, Lieut.-Commander Palmer, which had been reduced to ten knots by a shot in the engine-room, took *Onslow* in tow under a heavy fire and brought her out of action. Afterwards, in spite of bad weather, she went on towing until a tug from England took charge. Lieut.-Commander Palmer got a D.S.O. for this act of calm courage carried on though

the towing wire parted three times during the bad weather. In spite of this and the reduced speed, Palmer continued to struggle homeward with the lame duck astern.

A few incidents in the first phase of the battle may be of interest. The descendants of Lord Barham had presented an excellent portrait of the old Admiral to his namesake the battleship with the proviso that the picture should not be stored ashore but be carried into action; it was duly wounded by splinters. Barham's model stood between decks, and a shell bursting below sent fragments flying in all directions. It is a wonderful coincidence that the model Barham was scarred as though to scale in exactly the same places as the ship was damaged.

On board *Warspite* a heavy shell burst just outside the door of the church, blowing down the door. Everything inside was wrecked, chairs broken, splinters everywhere. In spite of all the ruin the crucifix was quite unhurt and still stood upon the broken altar, though the vases on each side were knocked over and smashed to pieces.

Every incident in the battle is of supreme interest to a nation of sea-going people who for centuries have made the great surrounding oceans of their different homes the chief element on which they build their power.

Malaya received much damage at "Windy Corner." A heavy shell struck the armoured deck in the battery, bursting inward and wrecking everything. Flames rushed down the ammunition hoists but were providentially extinguished before reaching the magazine. In the battery itself, however, many charges of cordite were ready beside the 6-inch guns, and a dreadful flame spread along from gun to gun, burning the men as they waited for the torpedo attack. Over sixty men were killed outright and many terribly burned. A boy near one of the after guns, when he saw the flames rushing down the battery, promptly rolled himself in one of the mats on which the shells are dumped, and thus escaped unhurt. Another

Jutland : *Tiger* with *Princess Royal, Lion, Warrior* and *Defence*

heavy shell struck a glancing blow on the roof of one of the turrets, but though the side armour was forced outward, leaving a gap, none of the men inside received more than a shaking.

Valiant was lucky enough to go through the battle without casualties. The doctors and the chaplain waited below for hours, but there was nothing doing. After the action a search was made for shell-holes or splinter marks, but none could be found. Only when the ship went into dry dock was a dent discovered which might have been caused by a shell striking under water.

One of the battle-cruisers—*New Zealand*—was also untouched though right in the thick of all the fighting. Before the war, when the ship visited New Zealand some Maoris foretold that there would be a great war and *New Zealand* would take part in all the big fights but she would come through safely. The prophecy seems to have been fulfilled. Certain charms were presented to the ship, and though she fired four hundred and twenty rounds from her 12-inch guns she emerged sound and uninjured from the action. As is well known, she was a present from the patriotic New Zealanders to the British Navy.

CHAPTER VIII

JUTLAND: SIR JOHN JELLICOE JOINS IN

THE Battle of Jutland, as described in the previous chapter, was begun by Sir David Beatty and Admiral Evan Thomas. To understand what followed when Sir John Jellicoe came on the scene it must be remembered that the greater part of the Battle Fleet had left Scapa Flow on the evening of May 30. Next day, as prearranged, Vice-Admiral Sir Thomas Jerram's squadron from Cromarty joined up, and in the afternoon the whole of the ships were steaming towards Horn Reef on the coast of Jutland.

Sir John Jellicoe had formed the fleet in six columns. Vice-Admiral Sir Cecil Burney was leading the starboard division in *Marlborough*, with *Revenge*, *Hercules* and *Agincourt*. Rear-Admiral Ernest F. A. Gaunt led the next division in *Colossus*, with *Collingwood*, *Neptune* and *St. Vincent*. Vice-Admiral Sir Doveton Sturdee commanded the next column in *Benbow*, followed by *Bellerophon*, *Temeraire* and *Vanguard*. Sir John Jellicoe led the next division in *Iron Duke*, with *Royal Oak*—a new ship—*Superb* and *Canada*, while Rear-Admiral Arthur C. Leverson led the next division in *Orion*, his flagship, with *Monarch*, *Conqueror* and *Thunderer*, and Vice-Admiral Sir Thomas Jerram, in *King George*, guided the port division—*Ajax*, *Centurion* and *Erin*.

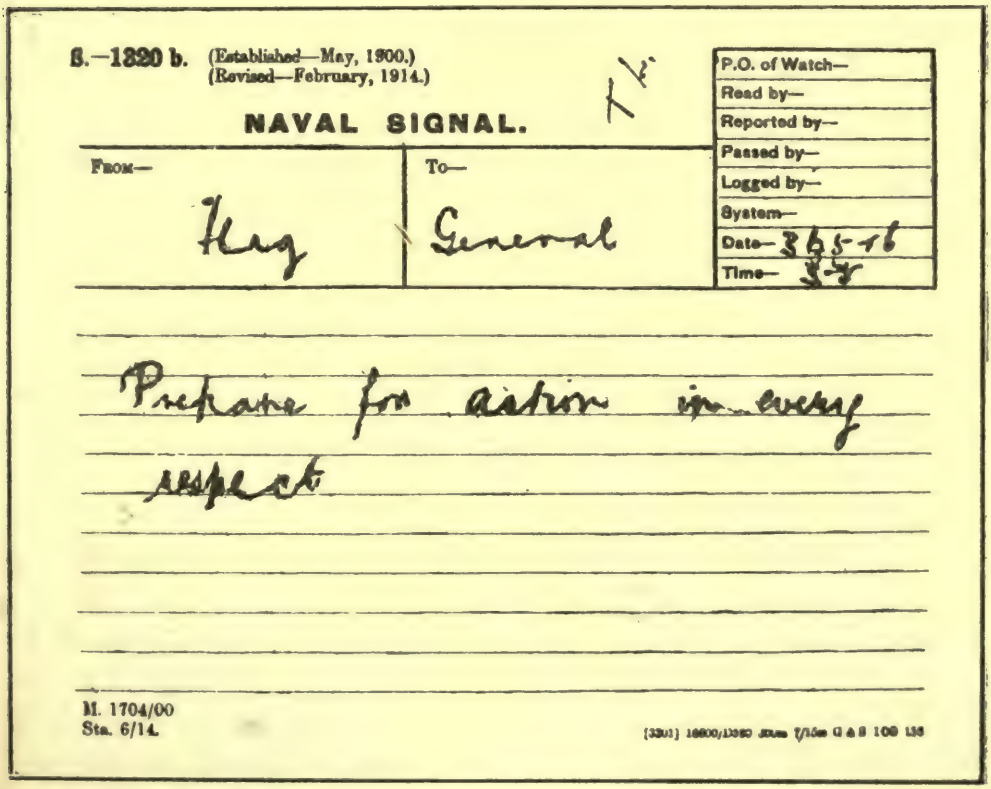
When Commodore Alexander Sinclair sent the wireless message to Sir David Beatty saying that he had sighted the enemy his report was intercepted by the wireless staff of *Iron Duke*. Sir John Jellicoe at once gave orders to raise steam for full speed. By this time the Battle Fleet had succeeded in increasing speed to twenty knots.

Jutland: Sir John Jellicoe Joins In

Every ship was ordered to keep clear of the wake of her next ahead so that this rate should be maintained.

At 4.24 Sir John Jellicoe signalled to Admiral Evan Thomas: "Are you in company with the Battle-Cruiser Fleet?" The reply returned: "Yes; I am engaging the enemy." The Commander-in-Chief sent the following order to attached cruisers soon after five: "Take station for the approach."

Our readers may like to see a copy of the Commander-in-Chief's next signal as it was received on board every ship.



S.—1220 b. (Established—May, 1900.)
(Revised—February, 1914.)

NAVAL SIGNAL.

T.V.

From—	To—	P.O. of Watch—
Flag	General	Read by—
		Reported by—
		Passed by—
		Logged by—
		System—
		Date— 31-5-16
		Time— 5-47

Prepare for action in every respect

M. 1704/00
Sta. 6/14.

(3301) 16600/1200 ...

At six o'clock the British Battle Fleet altered course from south-east by south to south. Its speed had now fallen to nineteen knots. By 6.16 it was clear that the German fleet would come into sight

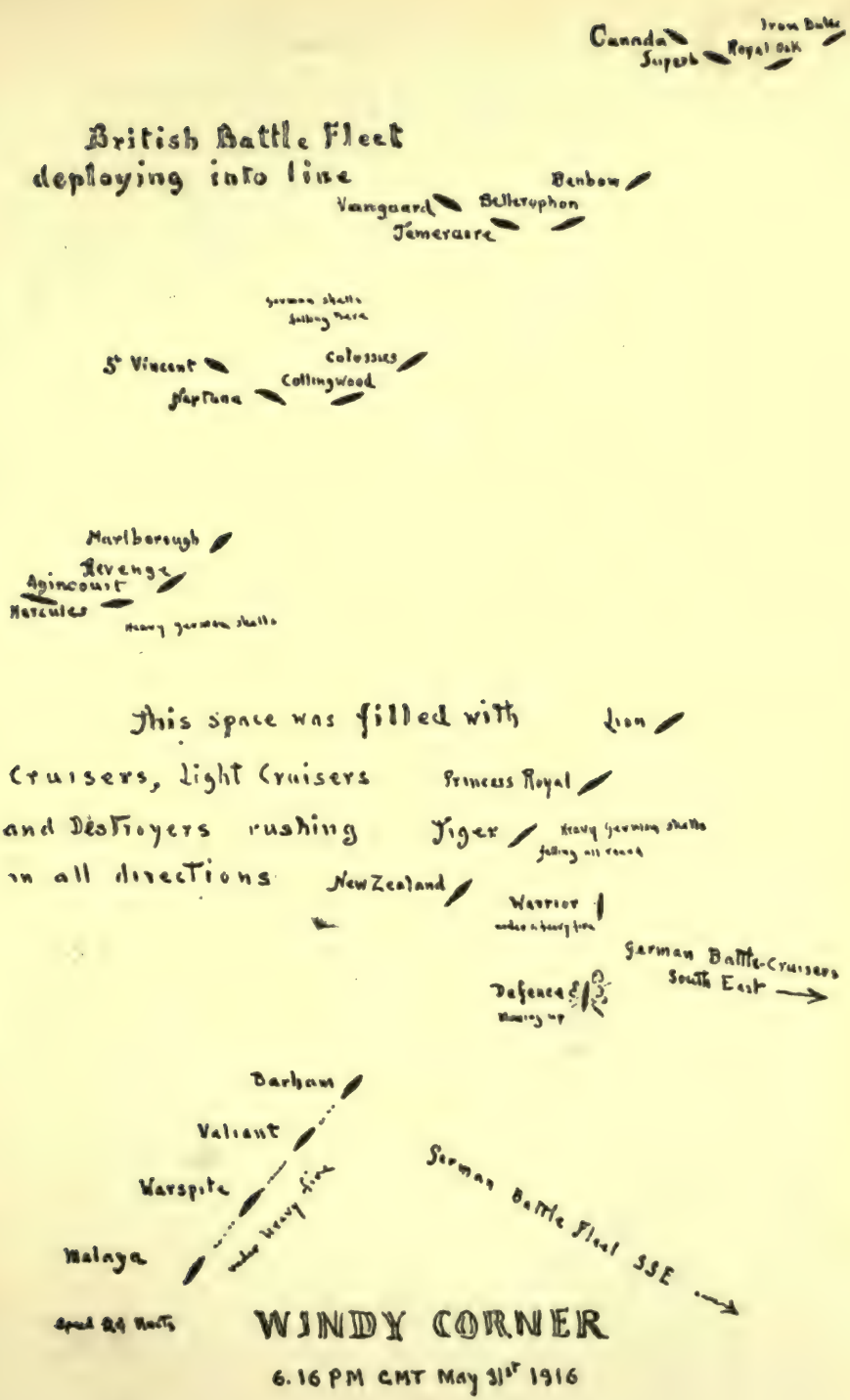
almost at once. Sir John Jellicoe made the signal: "Deploy into single line S.E. by E."

While this evolution was being carried out the officers on watch in the Battle Fleet obtained their first clear view of "Windy Corner" and the terrible fighting raging in that crowded, shell-torn patch of water. Rear-Admiral Hood's three "Invincibles," half hidden in smoke, were to the south-east in hot action with the German van. *Defence* and *Warrior* had crossed before the bows of *Lion*, and were rushing headlong to destruction, firing incessantly at the little "mad-dog" *Wiesbaden*, now in a sinking condition but still keeping in action with one small gun, while columns of steam were rushing out of her.

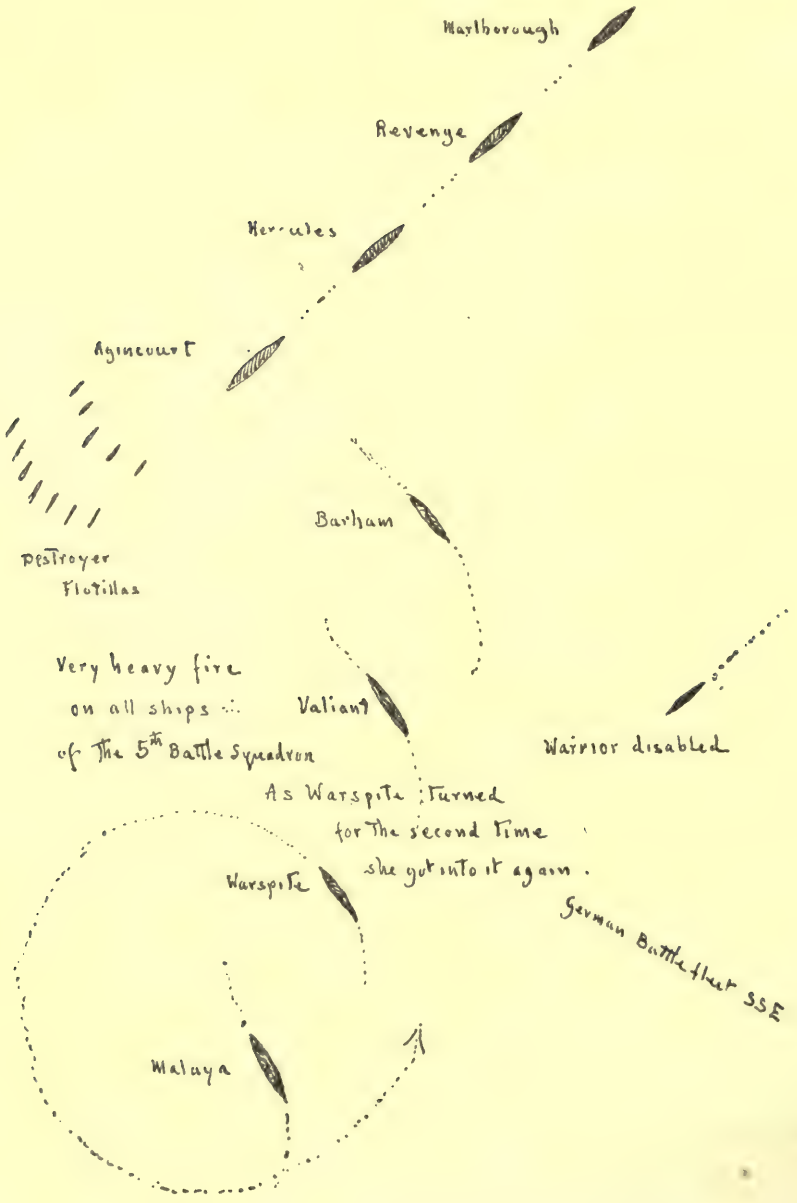
An officer who was in the fire control of *Benbow* has said that as he was watching a large salvo fell on the quarter-deck of *Defence;* another struck near the bridge, and then a third, when a huge column of flame and smoke towered into the air. The ship was gone. *Warrior* appeared to him to hide herself in smoke. The German fleet beyond showed only when the flashes of guns broke through the bewildering haze.

The sea between Sir David's ships and the main Battle Fleet was crowded with armoured cruisers, light cruisers and destroyers. They were rushing in all directions, and it appeared to the officer that Piccadilly had gone afloat in a chaos of smoke and flame. Many shells sent up their tall columns, but no ship was seen to be hit.

The following may give a notion of the point of view of the bluejacket when his ship is cleared for action. All woodwork on quarter-deck is removed, buckets and barrels are filled with water, hoses rigged, and all extra ammunition is up in place. Signal from *Galatea:* "Sighted enemy." News was piped through the ship and was greatly cheered. 4.30 p.m.—Signal: "Battle-Cruiser Fleet are engaging enemy." Cheers again greeted this news. Signal: "Thirteen battleships sighted steaming north." 5.50.—"Our light cruisers sighted enemy." Once again went up a chorus of exultation.


Canada
Iron Duke
Superb
Royal Oak
British Battle Fleet
deploying into line
Benbow
Vanguard
Bellerophon
Temeraire
German shells
falling here
St Vincent
Colossus
Collingwood
Hercules
Marlborough
Revenge
Agincourt
Hercules
Heavy German shells
This space was filled with
Cruisers, Light Cruisers
and Destroyers rushing
in all directions
Lion
Princess Royal
Tiger
Heavy German shells
falling all round
New Zealand
Warrior
Warrior
under a heavy fire
German Battle-Cruisers
South East
Defence
Barham
Valiant
Warspite
Malaya
the heavy fire
German Battle Fleet SSE
Speed 24 knots
WINDY CORNER
6.16 PM GMT May 31st 1916

V^th BATTLE SQUADRON
forming astern of AGINCOURT



The Second Division at Jutland

Action stations. All men at their posts wore life-jackets and respirators. "We cannot see what is taking place now, and have to depend on what comes down voice-pipe from upper conning-tower. My station is with repair party. I can honestly say there is not the least excitement or flurry, and, knowing that the safety of the ship greatly depends on rapidly obeying orders, everything is done very smartly. All is working smoothly."

When Sir John Jellicoe's deployment was complete the battle line measured eight miles from van to rear, and the cruisers extended another five miles. The German van, however, had turned away to the south-east to a distance where little more than smoke and flashes could be seen from the leading British ships. They seemed only three or four dim ghosts. The rear of Sir John's line, on the contrary, was well within range of the enemy, and at a quarter-past six the shells of the Germans were falling quite thickly. *Marlborough's* division, indeed, had been in action ever since the ships had turned for deployment. The range was only 13,000 yards, and the nearest enemy bore well abaft the starboard beam.

Agincourt was the last ship in the line; she fired fourteen of her 12-inch guns in one salvo—not one gun in each turret, but the whole of them all at once. The sheet of flame was big enough to create the impression that a battle-cruiser had blown up; it was awe inspiring.

Just before half-past six a three-funnelled German rushed to the westward between the rival fleets. Many of the heavy ships fired at her with their turret guns, for though her identity was doubtful, her colours could be distinctly seen. She was soon disabled, and sank.

In the First Battle Squadron only *Colossus* was actually hit by gun-fire, but the "Königs," or perhaps invisible destroyers sent quite a number of torpedoes at the rear of the battle-line, and as the tracks could be plainly seen from aloft the ships made many alterations of course to avoid them. *Marlborough* had successfully dodged one torpedo, but at 6.54 there was a heavy explosion right under her

fore bridge, and the water came pouring into the hydraulic engine-room, listing the ship seven degrees to starboard. This mishap did not prevent the stout ship from continuing in action. She fired fourteen salvos at one of the "Königs" and struck her so often that the German turned out of the line. *Marlborough* also avoided three more torpedoes. They had all been fired from very long range and were not running at top speed, and therefore easy to dodge.

One officer was in a cabin very hard at work plotting courses when the explosion occurred. It was close by, but he continued his work undisturbed. By and by he said to himself: "Here we are in the middle of an action. I suppose this is the proper time to have cold feet, and—yes, my feet are cold." Then, looking down, he found that he had been standing in sea water for some time. A fine example of a man absorbed by his duty to the exclusion of everything else.

Sir John Jellicoe, now becoming aware that the majority of his battleships were too far from the German line to do much execution, at 6.50 gave the order to turn four points to starboard by divisions.

The picture facing p. 142 shows Rear-Admiral Arthur C. Leverson's command in the act of carrying out the order. In the forefront a part of his flagship is seen with all the 13.5 guns trained on the beam. A salvo has just been fired, and compressed air is rushing from the long muzzles brushing away scraps of burning cordite and silk. *Monarch*, *Conqueror* and *Thunderer*, also in action, are seen following, and beyond is the fleet flagship *Iron Duke* turning to starboard, with *Royal Oak*, *Superb* and *Canada*. *Benbow's* division is lost in the haze astern.

Many tracks of torpedoes were reported during this phase of the action, but they were near the end of their run, and the captains, by frequent alterations of course, successfully dodged them. The German turret guns seem to have been strangely idle. One admiral near the van stated that not only had his ship not been hit, but he believed that no one ever tried to hit her. On the other hand he saw

Royal Oak, Acasta, Benbow, Superb, and *Canada* in Action

quite clearly the bright flash in the haze as his own shells landed on the enemy.

As the divisions turned to starboard there was a little overlapping, and one yarn relates that a distinguished admiral's hat was blown off by the discharge of a salvo from the last ship in the line ahead, now on the flagship's port bow.

Facing p. 144 is a picture of the rival fleets seen from farther west. On the extreme left our destroyers are seen driving off a torpedo attack launched by the Germans at 7.10. Beyond are the battleships of the High Sea Fleet. The wash of *Iron Duke* is seen upon the water, and *Royal Oak* is following, firing her 15-inch guns at the distant Germans. *Superb* and the handsome Elswick ship *Canada* are in her wake. All are in hot action. *Benbow* is seen beyond, leading her division to starboard, and in the smoky distance are *Marlborough* and the ships of the First Battle Squadron.

An illustration of another incident which shows the indomitable spirit of the British sailor faces p. 146. *Acasta*, as was told in our last chapter, was very badly mauled in her encounter with German light cruisers, and was finally so damaged that she lay drifting close to the course of the British battleships. She had a list to starboard, two large holes just abaft the third funnel, one large hole forward on the port side, and sat very low in the water, her guns and torpedo tubes still trained abeam as they had been during the action. As the fleet flagship *Iron Duke* came rushing by, firing her guns and leading her division, the men of the plucky little destroyer rushed out, forming a line from the forecastle head to right aft, and gave their Commander-in-Chief three hearty cheers. *Acasta* was afterwards taken in tow by *Nonsuch* and brought safe to port.

At seven Sir David Beatty, who was now far away to the south-east and who had been gradually turning his squadron more and more to starboard, reported that the enemy was to the westward. The alterations of course by the battleship divisions had now brought the enemy's line once more into sight, and our heavy ships again

began their fire at the misty outlines upon the far horizon. The rear of the British line was still much nearer the enemy at 8,500 yards than the leading divisions at 15,000. In spite of smoke and haze the salvos fell with good effect upon both cruiser and battleship; the two classes seemed to be intermixed, as though some of the battle-cruisers had fallen back among the heavy ships. *Iron Duke*, at 7.20, trained her guns upon a "Lützow" type of cruiser, which spread a smoke screen as a protection. *Agincourt* had been in action with one of four battleships which showed up clearly, and her observers thought that at least four of her salvos had straddled the enemy. *Revenge* directed her fire on what appeared to be battle-cruisers, and made distinct hits on two of them. *Colossus* was fighting what she took to be "Derfflingers" or "Lützows" at ranges from 8,000 to 10,000 yards, and claimed several hits. The light cruiser *Calliope* also reported that the fire of *Orion's* line had caused two "Königs" to burst into flame.

This phase of the battle is quite different from the opening. Except *Marlborough*, which had been torpedoed, and *Colossus*, which had been hit by two 12-inch shells, not one of our battleships had received any damage whatever; some of them had not even been fired at. The High Sea Fleet, on the contrary—if we may believe the reports of our officers in the fire controls—had received considerable damage. Many ships turned away into the mists, whilst others covered themselves with a smoke screen.

It was evident to Sir John that the weather was too thick for accurate spotting at long range, so at 7.5 the whole Battle Fleet was edged up closer to the elusive enemy by turning simultaneously three more points to starboard.

The Germans, however, had no stomach for a fight at close quarters. A flotilla of destroyers supported by a cruiser made its appearance in the south-west, and owing to the impending attack the British fleet was ordered to turn again to the south. This brought the ships once more in line ahead. A report came from

Jutland: Crew of *Acasta* cheering the Commander-in-Chief

one of the "Orions" that a submarine had been sighted on the port bow. This report, along with the torpedo attack, successfully accomplished the German purpose. A heavy fire was opened at the enemy destroyers, sinking at least one of them in spite of a third smoke screen, and the British battleships were kept very busy dodging torpedoes. First they were turned two points to port by subdivisions. This, however, was not enough, and later a further two points was ordered. At least twenty torpedoes were seen, but they were mostly near the end of their run and moving comparatively slowly. Some of them rushed among the ships of Sir Cecil Burney and Admiral Evan Thomas. Many were the alterations of course, and the captains, who had been carefully trained at this work in Scapa Flow, showed great skill in escaping the deadly "fish."

Meanwhile the whole of the German ships, covering the sea with a great smoke screen, had turned to the south-west, making the most of the short time before dark to get away.

Here is a German account of this part of the battle: "The German Commander-in-Chief turns his battle-line to a southerly and south-westerly course, on which the enemy was last seen, but is no longer to be found." It is to be presumed that this was intended to suggest to the German people that the British fleet had run away. As a matter of fact our ships were still to the north-east, but much precious time had been wasted, for the only German ships still in action were those which had dropped astern disabled. Twenty minutes after the torpedo attack a second was launched by the enemy. It was met by the destroyers attached to the Fourth, First and Fifth Battle Squadrons, and three of the enemy were sunk. Six torpedoes were seen by the Fourth Light Cruiser Squadron, but no ship was hit except by gun-fire from the retiring German battleships. *Calliope* received a shell and launched her torpedoes in reply, which caused a big explosion on board a German ship.

Sir David Beatty's report of this part of the battle is as follows:

"Between 7 and 7.12 p.m. we hauled round gradually to S.W.

THE GRAND FLEET

At 7 15 PM May 31st 1916

by S. to regain touch with the enemy, and at 7.14 p.m. again sighted them at a range of about 15,000 yards. The ships sighted at this time were two battle-cruisers and two battleships apparently of the 'König' class. No doubt more continued the line to the northward, but that was all that could be seen. The visibility having improved considerably as the sun descended below the clouds, we re-engaged at 7.17 p.m. and increased speed to 22 knots. At 7.32 p.m. my course was S.W., speed 18 knots, the leading enemy battleship bearing N.W. by W. Again after a very short time the enemy showed signs of punishment, one ship being on fire, while another appeared to drop right astern. The destroyers at the head of the enemy's line emitted volumes of grey smoke, covering their capital ships as with a pall, under cover of which they undoubtedly turned away, and at 7.45 we lost sight of them.

"At 7.58 I ordered the First and Third Light Cruiser Squadrons to sweep to the westward and locate the head of the enemy's line, and at 8.20 p.m. we altered course to west in support. We soon located two battle-cruisers and battleships, and were heavily engaged at a short range of about ten thousand yards. The leading ship was hit repeatedly by *Lion*, and turned away eight points, emitting very high flames and with a heavy list to port. *Princess Royal* set fire to a three-funnelled battleship; *New Zealand* and *Indomitable* report that the third ship, which they both engaged, hauled out of the line heeling over and on fire. The mist which now came down enveloped them, and *Falmouth* reported they were last seen at 8.38 steaming to the westward.

"At 8.40 p.m. all our battle-cruisers felt a heavy shock, as if struck by a mine or torpedo or possibly sunken wreckage. As, however, examination of the bottoms revealed no sign of such an occurrence, it is assumed that it indicated the blowing up of a great vessel. This seems a very probable explanation in view of the condition in which the enemy was last seen."

Darkness was coming on, and Sir John Jellicoe turned his fleet

by divisions to the south-west. It was once more in line ahead, having turned in a great semicircle during the fight.

A little after nine the Admiral ordered the Battle Fleet to form divisions in line ahead, disposed abeam to port, with the columns one mile apart steering south. The destroyer flotillas were ordered to take station five miles astern. Admiral Beatty's battle-cruisers now bore west, and the cruisers were between the two fleets.

About this time the whole of the enemy seem to have turned towards Horn Reef, and some German destroyers wandering eastward in the dark now made an attack on the Second Light Cruiser Squadron, at that moment in rear of the battleships. It seemed to have been a half-hearted affair, and the enemy were driven to the north-west, though the rest of Admiral Scheer's fleet continued to push eastward.

At ten o'clock three German light cruisers ran across *Castor*, flying the broad pennant of Commodore Hawksley. The ships were only two thousand yards apart, and the rapid and accurate fire of the enemy soon knocked away the wireless gear of the British light cruiser and damaged her bridge. She replied by firing torpedoes, and the leaders of her flotilla, *Magic* and *Marne*, followed suit; but the destroyers astern, unfortunately, did not join in, as they were not sure of the identity of the strangers. However, the enemy made off after a violent explosion. The German accounts seem to suggest that these wounded vessels were *Hamburg* and *Elbing;* the latter ship afterwards sank.

Commodore Goodenough was the next to meet the German attack. *Southampton* and *Dublin* had a sharp engagement lasting fifteen minutes with what is supposed to have been the German Fourth Scouting Group. Four enemy ships concentrated all their fire on the two leaders of the British Light Cruiser Squadron. The range was very short, and both ships suffered many casualties. Three fires broke out on board *Southampton*, but the fine work of officers and men promptly dealt with this menace. It is thought that the

light cruiser *Frauenlöb* was sunk by our Light Cruiser Squadron at this moment.

To give a personal impression the following is a description of the night firing by an officer in a light cruiser:

"At midnight we steamed into a great trail of smoke. As it drifted across it seemed to be from Westphalian coal. It smelt of Hun, and through it came the dim outline of a German battleship. She was all alone. It was too late to fire our torpedoes, so we left the great hulking stranger to the flotillas coming up astern. Ten minutes later came a very good imitation of hell upon earth. Searchlights dazzled, guns flashed, star shells high in air illumined the clouds, whilst cordite smoke and small fires danced upon the surface of the seas. Suddenly a tremendous explosion shook our ships. It was followed by dead silence. We were in great delight. One Hun gone, anyhow! I am afraid it is now doubtful if the German ship was really sunk. Like cats, they have nine lives, and require at least two or three torpedoes to send them to the bottom."

In obedience to Sir John Jellicoe's orders six columns of destroyers steamed five miles astern of the Battle Fleet. The Eleventh and Fourth Flotillas were the most westerly of these columns, and naturally the first to bear the brunt of the German movement to the eastward across our rear. The forerunners had been engaged by our light cruisers. At 11.30 the bulk of the enemy began to loom out of the darkness, and in a moment our gallant destroyers were right in the midst of terrible fighting at close quarters. *Tipperary*, leading the Fourth Flotilla, was set on fire and dreadfully damaged by the hellish hail of shells. Captain Wintour and a great part of his splendid crew were lost, only a very few survivors being picked up next day. *Spitfire* (Lieut.-Commander Trelawny), the second astern, coming on full speed, fired her torpedoes at the misty shadow of a four-funnelled ship, and then dashed into a light cruiser, carrying away thirty feet of the skin-plating of the German before she scraped clear. *Broke*, leading

her half-flotilla, came close to a German on her starboard bow. "Full speed starboard! Hard a starboard!" Simultaneously the German challenged with coloured lamps and opened fire. An 11-inch shell struck the lower bridge, killing those on duty, smashing engine-room telegraph and wheel. The helm was over to starboard, the telegraph at full speed, while the port engine was only running at half speed. Round came *Broke*, striking the unfortunate destroyer *Sparrowhawk* just before the bridge, cutting off her bow and pressing her round. Another of the flotilla came head first at the poor, noseless boat and chopped off her stern also. The remainder drifted helplessly until sighted in the morning by *Marksman*, which rescued the crew and sank the wreck as too far gone for salvage.

Half the crew of *Broke* were wounded or killed, the doctor amongst them, and the sick-bay steward did splendid work amongst the sufferers, being afterwards awarded the D.S.M. The crippled destroyer leader was put on a course which it was hoped would take her clear of further trouble, but instead it brought her amongst three German destroyers, which at once opened fire. *Broke* made reply with her only remaining gun. The enemy could not have known what an easy victory was within their grasp, for they drew off, leaving the ship so damaged that the navigators at first talked of making for Norway. A sporting chief, quite unmoved by the dreadful fighting he had been through, consulted a book as to where the best salmon fishing might be found in that country.

The battered destroyer leader, navigated from the wardroom table, as the charthouse was gone, afterwards had an adventurous journey as she tumbled towards home, being obliged to steam many devious courses, for, as the wind shifted, she must needs change direction to keep the seas from breaking into her broken fabric. On arrival in the Tyne her crew heard that they had been given up for lost.

To return to the battle; at midnight the remainder of the Fourth Flotilla, still steaming to the south-east, ran athwart the enemy's

Second Battle Squadron. The destroyer *Fortune* was sunk at once, but her sisters, *Ardent*, *Ambuscade* and *Garland*, were ready with their torpedoes, though it is quite impossible to say which of these splendid little craft can claim the battleship *Pommern*. The enemy admitted that she was sunk at this time. So to one or other belongs the glory.

Soon after this more German heavy ships came on the heels of the Second Squadron, so *Ardent* rushed again into the midst, firing her torpedoes with indomitable gallantry. Such a heavy fire crashed into the desperate little craft that she sank. Five hours afterwards Lieut.-Commander Marsden was rescued with one man—the only survivors.

Later on the enemy's ships, steaming to the east, ran athwart another destroyer leader, *Faulkner*. A little before two in the morning Captain Stirling became aware of six ships on his starboard bow. They seemed to be of the "Kaiser" class. He increased speed to twenty-five knots, and, working his flotilla round into a favourable position, sent all his torpedoes at the enemy. The explosion on board the third ship was so tremendous that our sailors thought the magazine must have gone. One of Captain Stirling's destroyers, *Mænad*, had her torpedo tubes bearing to starboard, and so was not ready at the critical moment. Commander Champion therefore steamed ahead. He fired one of his torpedoes to port, and then altered course to the south-east, discharging two more of his torpedoes to starboard. With one he made a palpable hit, flames reaching the masthead of the German battleship, bringing with them death and disaster.

The enemy have always denied that our destroyers had any success, saying that only the out-of-date *Pommern* and a light cruiser had been sunk by torpedoes. The truth is that an up-to-date German battleship was very hard to sink either by gunfire or torpedo. Some German prisoners aboard *Ganges* solemnly declared that they had seen at Blohm and Voss a German battleship which ought to have been lying at the bottom of the Baltic. One does not, as a rule,

attach much weight to the discredited word of a German, but somehow with the knowledge we possess this statement has the ring of truth.

Here is an interesting description of the night firing from *Agincourt:* "From night time until almost daylight our small craft were attacking. Our upper deck was crowded with men watching the fight away to starboard. Volumes of tawny smoke intermixed with red flashes, and above, brilliant star shells lit up the clouds."

When Captain Stirling had definitely fixed the position of the German Battle Fleet he did his very best to send the information to his Commander-in-Chief. The Germans, however, had no stomach for more fighting, even in retreat. If the British ships could have been turned to the east they would still have intervened between the enemy and his bases. The Germans, therefore, sent out strong Telefunken waves, interfering with our dots and dashes so that no message got through.

Astern of our flotillas a number of scattered destroyers followed. These had lost touch with their leaders. At midnight a large vessel, which at first had been taken for one of our own, stole out of the darkness. She ran amok amongst our small craft, ramming and sinking *Turbulent* and doing much damage to *Petard.*

The High Sea Fleet had now passed across the rear of our battleships. Having pushed their way, with some damage, through the British flotillas, they were now to meet a new danger.

Abdiel was rather an odd-looking mine-laying flotilla leader. At first sight she seemed a destroyer, but at closer quarters it was evident that the boats, davits, guns and torpedo tubes were not real. Some artistic sailorman had painted them on the canvas screens which ran along both sides of the little ship. Concealed behind were rows of deadly mines. The light and shade on the boats and davits did not always correspond with the actual position of the sun at any moment, but the blue sky and cloud effects were admirable.

Whilst the High Sea Fleet was pushing its way towards Horn

Revenge

Reef *Abdiel* was laying a neat row of deadly mines right across the German track. She signalled as follows to Admiral Jellicoe:

"*Abdiel* to C.-in-C., Grand Fleet. Mines laid in position ordered at time ordered." Next morning one of our submarines stationed near Horn Reef heard several under-water explosions, and it was judged that some of the enemy had struck *Abdiel's* mines.

We will now follow the fortunes of Sir Cecil Burney's flagship.

At 2 p.m. on June 1 *Marlborough* had been obliged to reduce speed to twelve knots so as to ease the strain on her bulkheads. About 3 o'clock *Fearless* was ordered alongside like a picket-boat to transfer the Admiral and his Staff to *Revenge*. In the mist *Marlborough* had hauled out of the line. She had stopped her engines, but when boarded still had way on. The crew gave a spontaneous cheer as the Admiral went over the side. The gilded Staff were refreshed in the wardroom with hot cocoa, while *Fearless* raced after *Revenge*. In running alongside she unfortunately broke the fluke off her port anchor. The next task was to find *Marlborough* again and escort her to a British port. The pair met with many adventures. At first torpedoes were fired at the lame duck, and then you might have seen the old *Fearless* rushing round and pretending that she was a whole division of destroyers. When day dawned a Zeppelin was sighted, and it was a splendid sight to watch *Marlborough* blazing away with 13.5 shrapnel at her unwelcome visitor.

About nine in the morning the two ships passed what looked like a Dutch trawler, and after she had dropped out of sight the wireless staffs heard a loud conversation in Telefunken, obviously reporting the position and course of *Marlborough*. Everyone, of course, expected to be attacked by German torpedo craft. Before leaving, *Fearless* had been told that an escort of four destroyers might be expected to overtake her at about 1 p.m. The hour arrived. There was no signal. At two there was still nothing visible. About 3 o'clock, however, a signalman reported destroyers coming up on the port quarter—the direction of the German fleet. All turned their

glasses and counted the numbers. Thick and fast they came. Eventually twenty destroyers and some light cruisers could be distinctly seen. Matters looked serious: *Marlborough* trained all her turret guns upon the strangers. On the bridge of *Fearless* the button was pressed and hooters grunted all over the ship; but in the end the flotillas proved to belong to Commodore Tyrwhitt, who had been scouring the seas looking for trouble. He was now on his way to Harwich and promptly detached some of his destroyers to act as a screen. *Fearless* had been zigzagging at high speed ahead of the slow-going *Marlborough*, but was now able to have a spell, taking up a station astern.

The next night a strong wind began to blow, and at one in the morning the wounded battleship, without any preliminary signalling, suddenly spoke: "*Marlborough* to *Fearless* and destroyers. Be prepared to come alongside and take off ship's company." This was a great shock. No one had the least idea things were so bad. Warps and fenders were made ready. However, at three the wind lulled a little, and the destroyers were ordered to lay an oil track ahead. *Fearless* was at the same time requested to take station on *Marlborough's* starboard bow as close as possible, so as to keep the seas from breaking too heavily on the upper deck. It was a difficult and dangerous manœuvre in the dark, but though some of the officers of the watch felt the hair of their heads lifting it was carried through successfully, until in the morning watch the gale gradually died away.

Finally the wounded ship and her escort arrived off the Humber. Then another signal was made from *Marlborough* to *Fearless*: "Request that you will lead me into harbour as my compasses are out of adjustment. We are drawing forty feet." This was rather a blow to the navigator of *Fearless*, but he took his courage in both hands and brought his unwieldy charge safely in to where the local pilot with his bustling tugs took all further responsibility.

As the two ships parted the crews cheered, and *Fearless* finally

arrived in the Forth to find that she had been popularly reported as lost.

Let us now return to the Commander-in-Chief.

At dawn on June 1 the Grand Fleet was once more turned towards the north. The weather was still misty, and the Sixth Division had dropped astern, owing to *Marlborough's* damaged condition.

The destroyer flotillas had been heavily engaged; they were much scattered, and in fact did not join up until nine in the morning; as might be expected there was some confusion.

By the time Sir John Jellicoe had concentrated his fleet it had become evident that the Germans had passed behind the shelter of their mine-fields. There could be no more fighting. The battle was at an end. It was not more inconclusive than most of the historic sea battles.

We had been very near a great victory. For a short time our Battle Fleet had everything in its favour; our shells were hitting and the German reply was weak and insignificant. Admiral Scheer found himself in a very awkward position. The British fleet was between him and his bases with twenty-seven British battleships against twenty-two German. He looked to his flotillas to get him out of his troubles, and they soon launched a great number of long-range torpedoes. Whilst our admirals and captains were skilfully dodging these deadly weapons the High Sea Fleet enveloped itself in smoke and escaped to the south-west. Daylight was failing. Admiral Jellicoe would not risk a battle in the dark, so he brought his fleet into night formation and steamed south, keeping his destroyers five miles astern. Covered by darkness, the German Admiral doubled back towards Horn Reef, running into the midst of the British destroyers. He lost one old battleship and a light cruiser, but by daylight the bulk of his ships were far to the east, making for the shelter of their mine-fields. Meanwhile a Zeppelin flew over and reported the position of the Grand Fleet.

More Sea Fights of the Great War

In June, 1916, the *Hamburger Fremdenblatt* published as a message from Berlin a full description of "The German Naval Victory" at the Skagerrak. The reader will notice that the correspondent at first makes the mixture of truth and (shall we say) inexactitude quite weak—a bumper of truth with just a dash of imagination. As the story proceeds his fancy is more exuberant, and in the end he draws the cork out and pours in lurid fiction with a liberal hand. It should be noted that the Germans used mid-European summer time and the British reckoned by Greenwich mean time:

"At 4.35 p.m. our cruisers, proceeding ahead of the High Sea Fleet, sighted seventy nautical miles to south-west of the Skagerrak four small English cruisers of the 'Calliope' class, which ran at highest speed northwards, pursued by our cruisers.

"At 5.20 our pursuing cruisers sighted to the westward two further enemy columns, consisting of six battle-cruisers and a considerable number of small cruisers and destroyers. Our cruisers took a course towards the new opponents—this being a course towards the south. Our cruisers advanced to thirteen kilometres from the English battle-cruisers and destroyers, which meanwhile moved southwards, and opened fire on southerly to south-easterly courses. In the course of this flight two English battle-cruisers and a destroyer were sunk. After half an hour's fighting powerful new enemy forces came into sight from the north of the enemy; they proved to be five battleships of the 'Queen Elizabeth' class. At the same time the main German force approached from the south and intervened in the fight. Our cruisers placed themselves ahead of their own main force.

"The big ships of the 'Queen Elizabeth' class attached themselves to the enemy cruisers. The whole combined German fleet now steamed northwards, and in face of its attack the enemy immediately turned away to the north and attempted at the highest speed to escape from our extremely effective fire, and at the same time,

with an easterly course and employing its speed, which is superior to that of our fleet as a whole, to pass the head of our line, while the German Battleship Squadron in rear of the line could not yet get into action with the enemy. Our fleet, the cruisers still leading, followed the movement of the enemy at highest speed. An English cruiser of the ' Achilles ' class and two destroyers were sunk. This period of the battle lasted some two and a half hours."

Meanwhile the *Fremdenblatt* tells its readers : " There approaches from the north, presumably coming from Norwegian waters, the English main force, consisting of more than twenty battleships.

" The climax of the battle is reached. Towards 10 o'clock all the German ships are together facing the whole English Fleet. At a distance of some fifteen nautical miles the battle now pursues its course eastwards. While the English Cruiser Fleet continues its attempts to catch up the head of our line Admiral Jellicoe is striving to put himself with his large battleships like a cross of a T in front of the head of our line. As the head of our line thus comes for a time under fire from both sides Admiral Scheer throws the German line round on to a westerly course, and at the same time our torpedo boat flotillas are ordered to attack the enemy, and they do so three times in succession with splendid vigour and visible success. A number of the large English battleships suffer severe damage, and one sinks before our eyes. By these attacks the English Main Fleet is driven away to the east, whence it will afterwards have taken a north-westerly course homewards. The German fleet ceases its violent cannonade at 11.30 as the English had stopped firing, and after nightfall there was nothing but the flash of their salvos to give us a target. As the enemy cannot be found again the main battle is broken off."

In fine form the *Fremdenblatt* concludes :

" During the night numerous cruiser fights and torpedo boat attacks develop against individual enemy ships which either had gone astray or had been ordered to worry us and to cover the retreat of

the English. In these actions an enemy battle-cruiser, a cruiser of the 'Achilles' or 'Shannon' class, several small enemy cruisers and at least ten destroyers are sunk—six of them by *Westfalen* alone."

The cruiser of the "Achilles" class claimed as sunk in this account was no doubt *Black Prince*, which had lost touch with the British fleet during the action. One at least of the German light cruisers also lost touch. The middle portion of the destroyer *Sparrowhawk*, which, the reader may remember, had both her ends cut off in collision, drifted slowly broadside on. At three in the morning of June 1 she sighted two miles away an enemy light cruiser steaming slowly north. After a little time the German turned on her side and sank head first. *Marksman*, with other destroyers, afterwards came upon the wreck of *Sparrowhawk* and rescued the crew.

The Battle Fleet at eight in the morning passed over the scene of some of the fighting; much wreckage and many bodies of dead Germans went drifting by.

Here are some jottings from one of the battleships:

"9.30—Just passed three or four large steamers—many rescued were on board. Wreckage, three or four men seen waving hands on it dressed in duck trousers and flannels. Dutch tug going towards them. Wreckage and oil everywhere; no enemy in sight. Altered course for base.

"*Friday morning.*—Arrived Scapa, coaled and got in ammunition; ready for sea same day—splendid work. Everybody cheerful."

Soon after the battered German ships had crawled into port an official Berlin telegram of June 7, 1916, claimed the battle as "the German victory won by able leadership and by the effect of our artillery and torpedoes."

Later on Captain L. Persius, the naval critic, on November 11, 1918, in a letter to the *Berliner Tageblatt*, said that "Germany narrowly escaped a crushing naval defeat at Jutland, sustaining severe losses, and it was clear to all acquainted with the situation that this battle would be the only one." Later still the captain stated "that

the German seamen of the lower deck had been brought by bad handling at last into a state of despair."

Official information issued in February, 1919, gives the number of German casualties in the battle as only three thousand and seventy-six. The flagship of the battle-cruiser fleet, *Lützow*, received forty direct hits and was twice torpedoed, being finally abandoned before she sank with four hundred casualties. The old battleship *Pommern* was also torpedoed and sunk.

The battleship *König* was hit fifteen times and lost sixty-five of her crew. *Grosser Kurfürst* was hit by four heavy shells and one torpedo. Her casualties were thirty-three. *Markgraf* was hit by a torpedo and badly damaged. *Oldenburg* was hit by a shell which killed eleven and wounded twelve—mostly officers on the bridge. *Rheinland* was hit twice and lost eight killed and fifteen wounded.

The battle-cruiser *Seydlitz*, hit by twenty-eight shells and one torpedo, was towed home in a sinking condition and beached.

Among the battle-cruisers *Derfflinger* was hit seven times, with serious damage to turrets, casemates and armoured belt.

Moltke had three hits by big shells and six smaller. *Von der Tann* took six weeks to repair.

Casualties were very heavy among the German light cruisers. *Wiesbaden*, after being wrecked by gunfire, was torpedoed and sunk; twenty-two men got away on a raft but only one survived. *Frauenlöb* was torpedoed and sunk with only eight survivors. *Rostock* was sunk by torpedo and gunfire, and *Elbing* run down by a German battleship after an attack by *Castor* and two destroyers.

Five German destroyers are known to have been sunk, and many others were so damaged that they were not worth repair when towed home.

It must be admitted that the German casualties were nothing like so heavy as those on the British side. The fact that their ships were much better protected is no doubt the reason. We lost five big ships with practically all hands (roughly, between four and five thousand

men), whereas the German casualties were more evenly distributed. On the other hand, although a large number of the German battleships were damaged, only one of our main Battle Fleet was hit by gunfire and one by torpedo. The enemy gunfire at the beginning of the action appears to have been wonderfully accurate, but it became very wild at the close. We may conclude that the German sailors became demoralised when our heavy shells began to burst amongst them. The British, on the contrary, we know, continued to fight their guns in spite of dreadful losses to the very end. They were cool and collected and made many hits.

It appears to be the fashion for a certain class of journalist to point out what a glorious victory Sir John Jellicoe might have won and how profoundly the whole European situation would have been altered had he acted differently. It would be a good thing if these newspaper sailors would realise what the situation might be now had Sir John risked the Battle Fleet and by ill-luck lost, say, half a dozen super-Dreadnoughts and with them his superiority over the enemy.

The full effect of the so-called inconclusive Jutland battle was only fully seen in the mutiny of the sailors at Kiel and Hamburg and the surrender of the High Sea Fleet on November 21, 1918.

In conclusion, the authors of this book would say that through the obvious disconnectedness of its narrative there shines one lesson to an island people and those sprung from them. Sea power is and always has been to the Anglo-Saxon race the one and only key to land power, to self-preservation and the protection of that form of civilisation which for centuries has been their unchallengeable inspiration. Inspiration and destiny are spiritually one.

"No spot in Britain can be so sacred," says Green in his imperishable prose, "as that which first felt the tread of English feet." He was speaking of that far distant past, when the Anglo-Saxon first landed from his long-ship, bringing not only sea power, but the seed of that greatness of spirit and endeavour which has once again

saved Europe from an intolerable military despotism; just as that greatness of spirit saved her from Spain and from Napoleon. Wilhelm of Germany personified a nation in arms. His failure was national, not personal. Britain on each occasion has saved Europe by the sea. The sea, by which she won her destiny, has proved her sure defence. It has kept her shores inviolate against a world in arms. Our power, which came with Hengist and his followers across the sea, abides by the sea.

If it be said that this war has not produced a Nelson or a Napoleon, one may ask, how would the great Emperor have dealt with a triple line of trenches stretching from the Flemish coast to Switzerland; or how would Nelson have fought a decisive action with a battle-line fifteen miles long, guns throwing shell far beyond the horizon, and torpedoes capable of sinking an enemy at seven thousand yards?

Never in her later history has Britain been more open to attempted conquest, but never has she been more difficult to conquer. The readers of these pages will realise the perils by which their country was threatened in the first months of the war. Every thoughtful man will understand Sir John Jellicoe's supreme difficulties. The parsimony of successive Governments had allowed our forces to shrink until they were not adequate to our needs. The British Navy was not strong enough for the work it had to do.

A few more errors of judgment like that which sent the gallant Admiral Cradock with more than a thousand officers and men to their deaths, and the rival fleets would have been so nearly equal that our initiative would have been snatched from us and our blockade broken.

Britain at the outbreak of war was obliged to spread her forces over oceans encircling the whole earth. A heart beating with high courage urged her to fight to the death on every sea in order to protect unbroken the arteries of her communications. Her far-flung flag flew over free men of her own race. In offence and defence she was alike glorious.

As to the so-called "freedom of the seas," we police the waters in time of peace for the benefit of all nations; we shall pursue our line of destiny no matter who stands in the way.

The mighty war just ended was a war of principles as well as a struggle for existence. Nelson's spirit brooded over our travail, our loss and our achievement. His great soul might, in the same circumstances of hidden danger and difficulty, have caused him to act much as Jellicoe and Beatty acted.

Those long months he waited and watched with stoical courage before Toulon have had their parallel in our own time. So our admirals have waited in storm and mist year after year in an age of science made hellish by subtle cruelty. Our sailors have fought against an enemy cunning and armed to the teeth (not the old navy of France, chivalrous and open-hearted), but a navy directed by a power destitute of truth, honour and humanity, a foe unworthy of the great traditions of the sea. We stand alone to-day triumphant as a maritime nation because we have upheld those traditions of the past.

In spite of science this book proclaims the fact with strange irony, nay, shouts it from the housetops, that it is not only the big gun with its armour-piercing shell, nor the unseen torpedo, nor the sneaking U-boat, nor yet the terrifying depth charge which wins in a mighty contest such as this, but man with a brave heart, a confident spirit and clean hands.

War is a moral conflict as well as a physical struggle; the human soul is alone unconquerable. The men of the Royal Navy, of the merchant service, of the volunteers and of the fishing fleets, in truth, all who by the inheritance of their race went down to the sea to battle for the right, have won imperishable fame for Britain. The ceaseless pressure of our power and the indomitable courage and endurance of our seafarers have made us greater in the federations of nations than even in the glorious days of the Nile and of Trafalgar.

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